

A Case Study Exploring the
Effect of Implementing a
Caseload Midwifery Model of
Care in a Melbourne
Metropolitan Maternity
Facility



Della Forster

Master of Midwifery

2001

RMIT

**A case study exploring the effect of implementing a
caseload midwifery model of care in a Melbourne
metropolitan maternity facility**

by

Della Forster
RN, RM, DipAppSc (Nurs), BHlthSc (Nurs)

In partial fulfilment of the requirements for the degree of
Master of Midwifery
by Coursework

Department of Nursing and Midwifery
Faculty of Life Sciences
RMIT University

March 2001

Table of Contents

Table of Contents.....	i
Declaration.....	iii
Acknowledgments	iv
Abstract.....	v
List of Tables	vii
List of Appendices	viii
 CHAPTER ONE: exploring a new model of maternity care.....	 1
1.1 Introduction.....	1
1.2 Background.....	2
1.3 Research aims and question.....	7
1.4 Definition of terms.....	8
1.5 Assumptions.....	9
1.6 Conceptual framework.....	9
 CHAPTER TWO: a review of the literature.....	 12
2.1 Introduction.....	12
2.2 Method of the review	12
2.3 The woman	13
2.3.1 Choice.....	13
2.3.2 Satisfaction.....	15
2.3.3 Relationship With Midwife	21
2.4 The Midwife	24
2.4.1 Professional and Personal Issues	24
2.4.2 Relationship With the Woman.....	26
2.5 The care.....	27
2.5.1 Continuity Models	28
2.5.2 Outcomes	31
2.5.3 Midwives' Views.....	35
2.5.4 Sustainability	45
2.6 Summary.....	47
 CHAPTER THREE: the research process	 49
3.1 Introduction.....	49
3.2 Research method.....	50
3.2.1 The Unit of Study	51
3.3 Sampling method and numbers.....	52
3.3.1 Sub-unit one (the women).....	53
3.3.2 Sub-unit two (caseload midwives).....	55
3.3.3 Sub-unit three (midwives not directly involved in caseload)	55
3.4 Data collection tools: design and piloting.....	56
3.4.1 Validity and Reliability.....	56
3.4.2 Sub-unit one (the women).....	59
3.4.3 Sub-unit two (caseload midwives).....	60
3.4.4 Sub-unit three (midwives not directly involved in caseload)	61
3.5 Data collection procedure	62
3.5.1 Sub-unit one (the women).....	62

3.5.2 Sub-unit two (caseload midwives).....	64
3.5.3 Sub-unit three (midwives not directly involved in caseload)	64
3.6 Data analysis	66
3.6.1 Sub-unit one (the women) and sub-unit two (caseload midwives).....	66
3.6.2 Sub-unit three (midwives not directly involved in caseload)	67
3.7 Limitations of the research process	68
CHAPTER FOUR: research findings and discussion	69
4.1 Introduction.....	69
4.2 Sub-unit one (the women).....	70
4.2.1 Demographic Details	70
4.2.2 The Women's Interviews.....	71
4.3 Sub-unit two (caseload midwives).....	75
4.3.1 Demographic Details	75
4.3.2 The Caseload Midwife Interviews.....	76
4.4 Sub-unit three (midwives not directly involved in caseload)	84
4.4.1 Response Rate.....	85
4.4.2 Demographics	86
4.4.3 Professional Issues.....	89
4.4.4 Caseload Midwifery.....	93
4.4.5 Caseload Midwifery at Birralee.....	95
4.5 Summary.....	108
CHAPTER FIVE: bringing the case study together	109
5.1 Introduction.....	109
5.2 The three sub-units: a joint discussion.....	110
5.2.1 A Summary of the Findings.....	110
5.2.2 Matching Patterns and Themes.....	111
5.2.3 Divergent Themes.....	112
5.2.4 Implications of the Findings for the Case Study Site?.....	113
5.3 Limitations of the study	114
5.4 Conclusion and recommendations	115
6. REFERENCES	118

Declaration

This thesis contains no material which has been submitted, in whole or in part, to qualify for any other academic award. To the best of my knowledge, it contains no material previously published or written by another person except where due reference is made in the text of the thesis.

Signed: Della Forster

Date: 2/11/01

Acknowledgments

I would like to thank all the people who assisted and encouraged me with this study, including my supervisor Associate Professor Diane Cutts.

Thank you to the women and midwives who participated in the study, without whose contribution the study could not have proceeded. In particular, thank you to the caseload midwives, who established and sustained this new model of care.

Thank you also to the MAVI (Midwives Association of Victoria Inc) Trust Fund which made a contribution toward the cost of the study.

Abstract

Caseload midwifery is a new form of maternity care where women are cared for throughout pregnancy, birth and the early postnatal period by a known midwife, with one or two back-up midwives. The major underlying philosophy of the model is to offer women continuity of both care and carer. This form of care was introduced into a maternity facility in metropolitan Melbourne. The current study used an embedded case study design to explore the views and experiences of the women and midwives involved in *caseload midwifery*. The views of the midwives not directly involved in *caseload midwifery* were also sought.

There were three sub-units of analysis. *Sub-unit one*: four women receiving *caseload midwifery* care. *Sub-unit two*: four midwives involved in providing caseload care. *Sub-unit three*: midwives not directly involved in caseload care. Of the 68 questionnaires sent to the midwives in *sub-unit three*, 37 were returned, giving a response rate of 54.4%. Data collection involved semi-structured interviews (*sub-units one and two*), which were audiotaped, and a structured questionnaire for those in *sub-unit three*.

Caseload midwifery was described positively by all three groups, and all considered that it should remain as an option of care at the maternity facility. The key positive aspect of the caseload model mentioned by each group was that the women developed a relationship with a midwife, which provided continuity for both the women and the midwives throughout pregnancy and birth. The negative factor identified by the two

groups of midwives was the issue of 'on call' work. The other important themes emerging were related to infrastructure, with the caseload midwives concerned about lack of support, lack of remuneration and the negative attitudes of some of their colleagues. The non-caseload midwives were concerned with the effect of the model on core ward staffing, and the cost of the model.

The conclusions drawn from this case study are that both women and midwives have a positive view of the value of the *caseload midwifery* model, however, if the caseload model is to continue as a viable and sustainable option of care for women at the maternity facility then the major concerns as mentioned above need to be addressed.

List of Tables

Table 1: Summary of metaphors emerging from interviews with women in sub-unit one 72

Table 2: Summary of metaphors emerging from midwife interviews..... 77

Table 3: Demographics of non-caseload midwives 87

Table 4: Professional issues, non-caseload midwives 89

Table 5: Professional development activities 92

Table 6: Non-caseload midwives’ understanding of *caseload midwifery* model 94

Table 7: Non-caseload midwives' views of the caseload model at Birralee 96

Table 8: Non-caseload midwives’ comments on positive aspects of caseload 98

Table 9: Non-caseload midwives’ comments on negative aspects of caseload 101

Table 10: Would participate in *caseload midwifery* 103

Table 11: Other comments on *caseload midwifery* 105

List of Appendices

Appendix I: Guilliland and Pairman’s model- The Midwifery Partnership (A model for practice).....	126
Appendix II: The Conceptual Framework.....	128
Appendix III: Summary of randomised controlled trials included in the literature review.....	130
Appendix IV: Research and Ethics approvals	134
Appendix V: Consent documentation for each sub-unit	137
Appendix VI: Plain language statements for each sub-unit	147
Appendix VII: Demographic questionnaire and interview schedule for the women in sub-unit one.....	154
Appendix VIII: Demographic questionnaire and interview schedule for the midwives in sub-unit two.....	163
Appendix IX: Questionnaire for the midwives in sub-unit three	168
Appendix X: Summary of data relating to metaphors: sub-unit one.....	175
Appendix XI: Summary of data relating to metaphors: sub-unit two	178
Appendix XII: Total responses to each point on Likert-type scale questions.....	183

CHAPTER ONE: exploring a new model of maternity care

1.1 Introduction

Caseload midwifery is a recently developed model of maternity care where women are cared for throughout their pregnancy, birth and early postnatal period by a known midwife, with one or two back-up midwives. This study explored the views and experiences of women and midwives approximately 18 months after a *caseload midwifery* model was implemented in a metropolitan maternity facility. An embedded case study design was used, as described by Yin (1994); that is, a single unit of analysis with specific sub-units examined separately. The case study methodology seemed the most appropriate choice because of its ability to investigate a phenomenon within its real life context, using multiple data sources to explore the effects of implementing a particular program (Yin, 1994). In this case it was important to explore and describe not only how women found the new model of care, but also how the midwives providing the care and those midwives not directly involved found the model.

There were three sub-units of analysis. *Sub-unit one*: four women receiving *caseload midwifery* care. *Sub-unit two*: four midwives involved in providing caseload care. *Sub-unit three*: 37 midwives not directly involved in caseload care. Data collection involved semi-structured interviews (*sub-units one and two*), which were audiotaped, and a structured questionnaire for those in *sub-unit three*. The embedded units were analysed separately first as individual 'cases', then units, and finally 'pattern

matching' was used to view the case study as a whole (Yin, 1994, p119-120).

Content analysis was utilised for *sub-units one and two*, and descriptive statistics for *sub-unit three*.

The findings of this study may offer a guide to care providers attempting to set up midwifery continuity of care models, by giving an in-depth perspective of the effects of the caseload model on the key players, that is, the women, the caseload midwives and the remainder of the midwives involved in conventional models of maternity care. The findings may also be used as a basis for further comparative studies in the area of maternity care provision, with a more in-depth understanding of women's needs and expectations, as well as how a model of this type may affect midwives. The in-depth perspective is relevant to the current provision of maternity care in Victoria, where particularly in rural areas, maternity care options are being evaluated and alternative models being considered. The findings of this study may therefore be of benefit to women (consumers), midwives, and managers of maternity facilities.

1.2 Background

The way in which maternity care is provided in Victoria has undergone many changes in recent years, and in particular, there have been many new models of care developed and implemented. These changes are a response to the increasing international evidence that in addition to safe care, women want choice, control and continuity in maternity care (ACT Health, 1994; Department of Health and Community Services Victoria, 1993; Department of Health NSW, 1989; Expert Maternity Group, 1993; Health Department WA, 1990; National Health and Medical Research Council, 1996).

In Victoria, the *Ministerial Review: Having a Baby in Victoria* (Health Department Victoria, 1990) played an important role in identifying what was happening in maternity care across the state, and in making recommendations for change. The review included the findings from a statewide survey of recent mothers, and recommendations included increasing the available models of maternity care, with particular attention to improving continuity of care within the public system. This issue had not been addressed in Victoria by the time of the following statewide survey of recent mothers in 1993, with evidence of no new models developed, the closure of one *birth centre*, and women expressing less satisfaction with many aspects of maternity care (Brown & Lumley, 1998a).

From the perspective of midwives themselves, major changes were being sought within the system. The end of 1995 saw the revocation of the *Midwives' Regulations 1958* (Victorian Government, 1985) in Victoria and the subsequent introduction of the *Code of Practice for Midwives in Victoria* (Nurses Board of Victoria, 1996). This legislative change was arguably a reflection of the changes that had been happening in midwifery in Victoria for some time, and an attempt to place midwives in a position of increased professional autonomy. Midwives in Victoria were striving to redefine what it meant to be a midwife, and to redefine how midwifery was practised, and therefore how maternity care was delivered, in this State.

The impetus for maternity care providers to introduce new models of maternity care therefore came from two sources: the international evidence of what women said they wanted, and the push by midwives to increase their professional sphere of

practice. The Commonwealth government also encouraged the development of these models by providing funding to encourage health care providers to set up new models of maternity care. For example, two *team midwifery* projects in Melbourne (Biro, 2000; Waldenström *et al*, 2000) and a caseload model in rural Victoria (Gumley, Haines & Holland, 1997) were funded by the Commonwealth Birthing Services Program. In Victoria, the State Government established the Maternity Services Enhancement Program (now called the Maternity Services Program) (Department of Human Services, 1999a) as an ongoing funding mechanism for health care providers to enhance maternity care. A major focus of this funding was the establishment of midwife managed models of maternity care, with an emphasis on “promoting measurable improvements in the continuity and quality of antenatal, intrapartum and postnatal care, individualised to the needs of particular women”, “providing increased birthing options” and “encouraging improvements in models of care” (Department of Human Services, 1999a, p2). Many providers set up new models using either existing funding arrangements, or the funding mentioned above. It is the instigation of *caseload midwifery*, one such model, that is the subject of this study. This particular model was implemented using existing (casemix) funding.

To put this study in context, it is important to briefly discuss midwifery models of care, of which there are several broad categories, as well as ‘standard’ maternity care. *Team midwifery* involves a small team of midwives (often between four and ten) who provide care to a group of women (often ‘low risk’, but some teams include women at ‘higher risk’) throughout pregnancy and birth (Secombe & Stock, 1995). In some schemes there may be postnatal or domiciliary care also provided. There may be an ‘on call’ aspect for the midwives involved, but this is not usually the case

in the Australian context. There is generally medical input for reviews and consultation. The aim of *team midwifery* has been to facilitate continuity of care and increased choice for women and to increase midwives' involvement in maternity care. In practice, it may be that the continuity achieved is limited by the number of midwives in the team, with an increased number of team midwives decreasing the opportunity for continuity, but increasing the flexibility within individual midwives' rosters.

Caseload midwifery (also known as *Know Your Midwife*) developed from *team midwifery* in a further attempt to achieve care by a known caregiver (Flint, 1993), which the team approach at times may fail to provide. The major underlying principle of *caseload midwifery* is continuity of caregiver. A primary midwife cares for women choosing this option. This midwife, with one or two 'back-up' midwives, provides antenatal, labour, birthing and postnatal care, and coordinates contact with other health care providers as necessary. Each midwife has her own 'caseload' of women, and cares for approximately 40 women per year (or part thereof if the midwife works less than full time) (Flint, 1993; Forster, 1998b; McCourt & Page, 1996). The midwife provides the majority of care for each woman in her caseload, and collaborates with obstetricians and other health professionals as necessary.

Birth centres are similar to the *team midwifery* model (although some operate as a caseload model), but the care provided by *birth centres* incorporates a 'natural childbirth' philosophy. Providing care in a 'home like' setting and encouraging family participation in care are also key aspects of the *birth centre* approach. *Birth centres* operate within strict criteria, and only 'low risk' women are eligible. Women

usually have their antenatal care within the *birth centre*, and there is often an agreed early discharge arrangement (usually 24 hours).

Standard (or conventional) *maternity care* incorporates a range of different approaches to care. Traditionally, in the Australian context, maternity care has been fragmented, with different groups of caregivers providing care at different stages. In a typical example, a woman may have her antenatal care provided by one or a number of medical practitioners, for example a general practitioner, an obstetrician or a resident medical officer, and the care may be hospital or community based. In the majority of instances in Victoria, *standard care* has been synonymous with antenatal care provided almost exclusively by medical practitioners, with little or no input from midwives, although in recent years some hospitals have developed ‘midwives clinics’, where a small number of ‘low risk’ women have antenatal care provided by midwives. In *standard care* models, labour care is often provided by a midwife unknown to the woman, and that midwife, or another medical practitioner may assist with the birth of the baby. Following birth the woman may then go to the postnatal ward, where another group of midwives provide care, as well as other medical practitioners if necessary. After discharge yet another midwife may visit the woman’s home to provide care.

In the maternity unit where the current study was undertaken, *standard care* was the model of care delivery. Approximately fifty percent of women attending the unit had their antenatal care provided by a general practitioner in the community, and most of the remainder had resident medical officers, registrars or obstetric consultants providing their antenatal care. A small number of women chose midwives to provide

this care. It is also relevant to note that at the time of data collection for the current study, the maternity unit had been through a period of major change. Two completely separate maternity units had amalgamated 18 months previously, with many of the midwives expressing their unhappiness about the amalgamation in the first instance, and at the time of this study many issues regarding the amalgamation and the new unit structure remained unresolved. The midwifery manager of the unit had also changed three months earlier.

With the introduction of the *caseload midwifery* model, no midwife was expected to take part except by choice. At the time of data collection, eighty-eight midwives were employed in the unit. Of these, five were currently involved in providing *caseload midwifery* care as the majority of their workload, fourteen other midwives were providing (or occasionally provided) some caseload care, and the remaining sixty-nine midwives were not involved in providing *caseload midwifery* care. The latter group did however provide core staffing on the unit, so part of their rostered work occasionally included caring for women who had chosen the caseload model, particularly in the postnatal area.

1.3 Research aims and question

The aim of this study was to explore the effect of implementing *caseload midwifery* as an option of care at a maternity facility in metropolitan Melbourne. The study explored the views and experiences of women choosing this option of care, as well as those of the midwives who provided the care. The study also explored the views and experiences of the midwives not involved in providing caseload care.

The research question was: what are the views and experiences of women and midwives, associated with a recently implemented *caseload midwifery* model in a Melbourne metropolitan maternity facility?

1.4 Definition of terms

Birralee: the Melbourne maternity unit where the case study was conducted.

Caseload midwifery: see definition in section 1.2

High risk: women who have a chronic health problem or a history of serious problems with a previous pregnancy are considered to be at ‘high risk’ of developing complications in a given pregnancy.

Low risk: women who have no serious health problems and no history of past pregnancy or birth problems are considered to be at ‘low risk’ of complications in a given pregnancy. In some models, such as *birth centres*, women whose pregnancy changes from ‘low risk’ to ‘high risk’ status may be required to transfer to another type of care. Other models, such as *caseload midwifery*, may not require this transfer, but may incorporate medical care as necessary.

Multipara: woman having her second or any subsequent baby (plural is *multiparae*).

Primipara: woman having her first baby (plural is *primiparae*).

Standard care: see definition in section 1.2

Team midwifery: see definition in section 1.2

1.5 Assumptions

If a model of care is to be successful and sustainable, then all key stakeholders need to be satisfied with the way the system works. The current study explored the effects of a recently implemented model of midwifery care in an existing maternity unit. There were three key groups examined, and the positive interaction of these three groups is vital to the successful introduction of a new model of care.

It was assumed that the information provided by the women and the midwives was an honest account of their views and experiences.

1.6 Conceptual framework

A conceptual framework is a way of explaining, describing, organising and integrating concepts to articulate how a phenomenon operates in a particular condition or setting (Polit & Hungler, 1989; Rudestam & Newton, 1992). Conceptual frameworks assemble abstract concepts together based on themes (Polit & Hungler, 1989) and can guide or give direction to research (Carveth, 1987; Polit & Hungler, 1989).

The current study sought to explore the effect on women and midwives of a recently introduced model of maternity care. As well as exploring the issues of the women's satisfaction with *caseload midwifery* care and the views of the midwives providing the caseload care, it seemed important to place that care within the system it

operated, and examine its introduction in a wider context. For this reason, the effect on the midwives' personal and professional lives and the views of the midwives not involved in providing caseload care, yet who provide 'core' staffing and support for any model within a maternity care setting, was also explored. In order to develop a conceptual framework to guide the present study, previous relevant conceptual models were reviewed.

The conceptual model of Guilliland and Pairman (1995) describes in part some of the issues related to the current study. These authors have developed a conceptual framework based on the underlying philosophy of midwifery as a partnership with women (see Appendix I). Their 'partnership model' involves a relationship between the midwife and the woman. They describe the relationship as intrinsically woman-centred in that "it only exists to meet the needs of pregnant women and their babies" (Pairman, 1996, p298), although both partners are accountable and have responsibilities within the partnership. Continuity of carer is central to the model, with the development of the relationship between the partners allowing increased trust and mutual empowerment (Pairman, 1996). The key concept described by the model which relates to and is utilised in the current study is continuity of care and carer throughout the childbirth experience. Three other key concepts described by the model: midwifery as woman-centred, the relationship as a partnership, and the professional autonomy of the midwife emerge in the current study in descriptions and interactions of some concepts.

The *caseload midwifery* model fits within Guilliland and Pairman's (1995) conceptual model, with its emphasis on having a known carer with whom the woman

develops a relationship, and the description of how that partnership works. However, the model does not describe the location of this care within a particular maternity service (usually hospital based) or the context of the midwife's life. Guilliland and Pairman's (1995) conceptual model in totality is possibly more relevant in the New Zealand context of maternity care provision, where care is centred on a contract between the woman and her care provider. In the current Australian context most models of maternity care provision take place within an existing system (usually a hospital or health care network), and any conceptual or theoretical frameworks need to recognise this.

The development of a conceptual framework to guide this study took into account the fact that the *caseload midwifery* model was implemented within a pre-existing and ongoing maternity care service, and that the model is not therefore limited purely to the relationship between the woman and the midwife. Issues around sustainability were considered important, such as the impact of *caseload midwifery* on the midwife's life and the reactions and views of the midwives outside of the model. The conceptual framework for this study (see Appendix II) consists of three major concepts comprised of a number of sub-concepts. The major concepts: *the woman*, *the midwife and the care*, together with their sub-concepts, will be defined and described as part of the literature review.

The advantage of undertaking the exploration of these concepts as a case study was that the case study site provides a 'real life' framework for exploring the conceptual framework.

CHAPTER TWO: a review of the literature

2.1 Introduction

The aim of this review was to critically examine the literature on pregnancy, birth and the postnatal period, within the conceptual framework outlined in Chapter One, with a focus on *caseload midwifery* and other new models of midwife-managed care. This included women's and midwives' views and experiences of midwife-managed models (compared to *standard care* when possible), continuity of care, women's satisfaction with care and the implementation and outcomes of these models.

2.2 Method of the review

Literature selected for this review was located using a computer search of the electronic databases Cinahl, Medline, Sociofile and the Cochrane Library from 1980-2000. The search was confined to these years as most of the recent changes in models of maternity care delivery were within this period. The literature search also included scanning of reference lists of individual papers identified, as well as relevant conference proceedings and personal communication. Key words/ topics searched were midwife, midwifery care, models of care, *caseload midwifery*, *team midwifery*, satisfaction with pregnancy care, pregnancy and birth, continuity of care and midwife satisfaction and experiences. Studies were chosen for inclusion because of methodological quality and appropriateness for inclusion, without considering results of the studies. Articles were confined to those written in English.

The review identified 12 randomised controlled trials (RCTs) that compared new models of midwifery care with *standard care*. Major outcome measures of these trials include satisfaction with care, use of obstetric interventions, and maternal and infant morbidity and mortality. The included RCTs are listed in Appendix III, including the methodology, sample size and major outcomes in relation to the current study. One non-randomised comparative trial was identified. Other appropriate descriptive studies, consumer surveys and government reports were also included in the review.

The review is presented using the structure of the conceptual framework, that is, examining the three major concepts of *the woman*, *the midwife* and *the care* as they relate to the research questions.

2.3 The woman

There are three sub-concepts discussed within the major concept *the woman*: *choice*, *satisfaction* and *relationship with midwife*. These three sub-concepts will each be discussed in relation to the key concept of *the woman*, that is, how each of these sub-concepts impacts on the care a woman receives during pregnancy, labour and birth and in the postnatal period. The focus is on midwife-managed models of care, and where possible *caseload midwifery*.

2.3.1 Choice

It is well documented in international and Australian literature that once optimal care in terms of maternal and infant safety has been assured, the three key elements

women want in their pregnancy care are choice, continuity and control (ACT Health, 1994; Department of Health and Community Services Victoria, 1993; Department of Health NSW, 1989; Expert Maternity Group, 1993; Health Department WA, 1990; National Health and Medical Research Council, 1996). The reports that have identified these findings suggest that the elements of choice, continuity and control are generally missing in maternity care, and strongly advise that this absence be addressed. This section of the literature review concentrates on one of those three elements, that is, choice for women in maternity care.

One Victorian report suggests that even where choice does exist for women, these choices may not be readily explained and offered, and many women are unaware of their options for pregnancy care in the public system (Health Department Victoria, 1990). Further, in Victoria there has been a lack of choice for women whose pregnancies are deemed to be at 'higher risk' of complications. There has also been a lack of access to different models of care for young women, those from non-English speaking backgrounds, women of lower socioeconomic status and women living in rural areas (Brown & Lumley, 1994; Department of Human Services, 1999b).

In a 1998 population-based study of models of antenatal care in Victoria (Department of Human Services, 1999b), although 21 models of care were identified, 93% of women received the majority of their pregnancy care from medical practitioners. Within the study population only six to eight percent of women had the majority of their pregnancy care in a midwife-based model. Issues such as women's lack of access to midwife care and lack of information on options of care are possible contributing factors to the low numbers of women receiving midwife-based care such

as the caseload model. Another factor may be a lack of options in certain geographical areas, particularly rural Victoria.

The study cited above demonstrates that increased options and choices in maternity care are gradually becoming available for women in Victoria, and shows that in recent years there have been a number of midwife-managed models of care developed and implemented. However, this needs to be seen in context; many women do not have access to these models of care for a variety of reasons. There have been two randomised controlled trials on *team midwifery* in Victoria (Biro, 2000; Waldenström, Brown, McLachlan *et al*, 2000), with the *team midwifery* programs continuing after trial completion. Several *caseload midwifery* models of maternity care have been implemented (Forster, 1998a; Gumley *et al*, 1997; McIntyre, 2000) and there are six *birth centres*, three recently established. A number of maternity service providers (mainly metropolitan) offer a midwives clinic as an antenatal option for women.

Women in Victoria, particularly in metropolitan areas, are therefore gradually being given the opportunity to have real choices for their care during pregnancy and birth, although these choices may not always be readily offered.

2.3.2 Satisfaction

Satisfaction with birth is a complex, subtle and constantly changing collage of memories, reflections, beliefs, reactions and convictions, 'remembered' by a series of active and even creative processes (Lumley, 1985, p144).

Women's satisfaction with maternity care is a complex area. It is generally accepted that satisfaction is multidimensional (Seguin, Therrien, Champagne *et al*, 1989), and that women's reports on satisfaction with maternity care may be particularly vulnerable to the halo effect, in terms of reluctance to criticise professionals who have cared for them (Bennett, 1985; Brown & Lumley, 1997; Seguin *et al*, 1989). Women may even credit professionals (and not themselves) with positive outcomes (Seguin *et al*, 1989). Green *et al* (1990) found that many women express high degrees of satisfaction with birth, yet this must be interpreted with caution in view of the tendency of women to describe that "what was, must be best" (Lumley, 1985). Defining what is meant by satisfaction is a complex issue in itself (Bramadat & Drieger, 1993; Lumley, 1985), and women may be satisfied with some aspects of their experience and dissatisfied with others (Bramadat & Drieger, 1993). Whilst well constructed questionnaires may elicit more responses which are easier to code and analyse, interviews may give the opportunity for more in-depth exploration of the complex topic of satisfaction with childbirth (Bramadat & Drieger, 1993; Lumley, 1985). Green *et al* (2000) suggest that studies on new models of maternity care have failed to ask women adequate questions on how satisfied they are with the quality of various components of their care.

In the randomised trials included in this review, women's satisfaction with care was usually increased in more than just the part of pregnancy that was included in the new model of care. In one trial, where satisfaction did not differ in either group, the intervention included only intrapartum care (Harvey, Jarrell, Brant *et al*, 1996).

Women who were allocated to the new models of care reported increased satisfaction in areas such as information giving and receiving, freedom to ask questions (Kenny,

Brodie, Eckermann *et al*, 1994; Rowley, Hensley, Brinsmead *et al*, 1995), “participation in decision making” or feeling they had made informed choices, their “relationship with caregivers” (Rowley *et al*, 1995, p294), “psychological aspects of care” (Waldenström & Nilsson, 1993, p3) and “midwives skills and attitudes” (Kenny *et al*, 1994, p2). Comments more common among women in the intervention groups included “treated with respect”, “staff sensitive to their needs” and a perception that they had received “individualised care” (Waldenström & Nilsson, 1993, p10).

Some authors have explored the notion that women’s expectations may affect satisfaction. In a prospective cohort study of 825 women in the United Kingdom, Green *et al* (1990) found that low expectations of the birth resulted in poorer psychological outcomes. Conversely, Slade *et al* (1993) found that positive expectations such as strongly predicted positive emotional experiences, had no impact on women’s satisfaction.

Many cross-sectional population-based surveys have examined women’s satisfaction with maternity care. The main criticism of population-based surveys such as this is that certain groups such as non-English speaking women, single mothers and young women tend to be non-responders, and therefore under represented (Brown & Lumley, 1994). In a South Australian survey of 599 women, Zadoroznyj (1996) found that young women under 26 years were less likely to be satisfied with all aspects of maternity care, whilst married women were more likely to be satisfied with all aspects, although the sample was under representative of very young mothers. In contrast, in a comparative prospective study, utilising semi-structured

interviews, McCourt (1996) found that women's views and comments were consistent across different social and cultural groups, and between those who did and did not answer a postal survey.

In the Victorian context two major factors which have been shown to be associated with women's satisfaction with maternity care are "the extent to which caregivers are perceived as helpful, and the degree to which women are given an active say in making decisions about their care" (Brown & Lumley, 1998b, p152).

2.3.2.1 Satisfaction with antenatal care

In a 1993 cross-sectional population based Victorian consumer survey, major determinants identified as affecting satisfaction with antenatal care were "staff seeming rushed", "waiting times" and "continuity" of care (Laslett, Brown & Lumley, 1997, p81). Women who had *birth centre* care were the most satisfied group, with 80% being satisfied, compared to 73% of women who had private obstetric care, 48% of women having public clinic care and 33% of the women having shared care. Models that offer antenatal continuity in the Victorian context are private obstetric care, *birth centre* care, and in recent years, midwife clinics and various midwifery models.

A South Australian consumer survey also identified waiting times and continuity of care as factors affecting satisfaction with antenatal care, as well as being treated as an individual and flexibility of operating hours (Zadoroznyj, 1996).

Increased satisfaction with antenatal care was reported in most trials included in this review. Aspects of care that women particularly mentioned as being positive were “psychological aspects” (Waldenström & Nilsson, 1993), “easier access to care”, “higher perceived ‘quality’ of antenatal care” and “decreased waiting times” (Homer, Davis, Brodie *et al*, 2000b, p257). In a Melbourne *team midwifery* trial, the women who received team care more often reported that they felt informed, were “given an active say” and that caregivers were “encouraging and reassuring”. They also felt care was less rushed and were “happier with the emotional support” (Waldenström *et al*, 1999). One trial which included only antenatal care, compared midwives and general practitioners with obstetricians, and found no difference in satisfaction (Tucker, Hall, Howie *et al*, 1996).

2.3.2.2 Satisfaction with labour and birth care

There are a number of factors which affect women’s satisfaction with their care during labour and birth. There is evidence that having a known caregiver in labour is strongly associated with increased satisfaction (Brown & Lumley, 1998b), although this was not the case in a *birth centre* context (Waldenström, 1998). Other factors which have been shown to increase women’s satisfaction are feeling informed, feeling in control, the presence of social support (Brown & Lumley, 1994; Hodnett, 1997b; Waldenström, 1999) and “midwife support” (Waldenström, 1999, p471). Conversely, factors that have been shown to be associated with women’s dissatisfaction with labour and birth care are lack of involvement in decision making, insufficient information about options and choices (Brown & Lumley, 1994; Green *et al*, 1990; Seguin *et al*, 1989), increased obstetric interventions (Brown & Lumley, 1994; Green *et al*, 1990) and a “perception that caregivers were unhelpful” (Brown

& Lumley, 1994). In the randomised trials included in this review, the women who received midwife-managed care (*caseload* or *team midwifery*) reported increased satisfaction with labour and birth care compared to those receiving *standard care* (Biro, 2000; Kenny *et al*, 1994; Morrison *et al*, 2000; Turnbull *et al*, 1996; Waldenström *et al*, 2000; Waldenström & Nilsson, 1993). This suggests that satisfaction may be increased in women receiving *caseload midwifery* care in the model being explored in this study, and supports the notion of introducing such care.

2.3.2.3 Satisfaction with postnatal care

Most of the RCTs included in this literature review on new models of maternity care had limited or no postnatal care component. Not surprisingly, there was often no difference in satisfaction with postnatal care between women receiving the new types of care and women receiving *standard care*. Only one trial reported an overall increase in satisfaction with postnatal care (Kenny *et al*, 1994). In a recent Victorian *team midwifery* trial where team midwives made a ‘social’ visit to the ‘team women’ on the postnatal ward, but did not actually provide care, women receiving team care were more satisfied with postnatal care. They rated their carers as being “more sensitive, understanding, encouraging [and] reassuring”, said they “felt better informed” and more often felt that care was not rushed compared with the women who received *standard care* (Waldenström *et al*, 2000).

Other factors shown to affect women’s satisfaction with postnatal care, from population-based and descriptive studies were the attitudes of the caregivers (Stamp & Crowther, 1994; Yelland, Small, Lumley *et al*, 1998; Zadoroznyj, 1996), hospital policies and staffing levels, and a perception by women that there is help and support

to look after the baby (Zadoroznyj, 1996). It is possible that receiving continuity of care in the postnatal period may help address some of these issues for women. For example, models such as *caseload midwifery* encourage a policy of staffing according to when the women require care, compared with staffing according to a rigid roster.

2.3.2.4 Factors not affecting satisfaction with care

Factors found to not affect women's satisfaction with care include income, parity, attendance at parent education classes, interventions in labour (Seguin *et al*, 1989) and pain relief in labour (Brown, Lumley, Small *et al*, 1994). A Victorian study of 312 women from Turkey, Vietnam and the Philippines found that there were no associations with satisfaction related to "maternal age, marital status, parity, length of time in Australia, English speaking ability, family income, education, method of birth, length of postnatal stay or method of baby feeding" (Yelland *et al*, 1998, p147). While this is an important finding which can help guide care givers and can guide further research, it was a self selected sample, and not necessarily generalisable to different cultural groups or settings. Likewise, none of the above mentioned studies specifically included *caseload midwifery* or made comparisons between the caseload model and standard models of care.

2.3.3 Relationship With Midwife

The relationship between the woman and the midwife appear as key concepts in conceptual and theoretical models explaining midwifery (Fleming, 1998; Guilliland & Pairman, 1994; Woodward, 2000), and in the conceptual framework of this study.

However, there was limited literature identified that addresses this area. The RCTs selected for this review reported little on the woman's experience of the relationship with the midwife, other than the satisfaction outcomes, as reported in section 2.3.1 of this chapter.

In semi-structured interviews with a sub-group of 40 women participating in a comparative (non-randomised) *caseload midwifery* trial in the United Kingdom, as well as from randomly selected responses to open ended survey questions of 200 women (McCourt, 1996), key themes [concepts] were identified which related to women's experiences of the model of care. Themes which emerged were "continuity of care and carer" (p9), which was a priority for women in both the *caseload midwifery* and *standard care* groups, and "the importance of a named midwife" (p9) in terms of consistency, support and enhanced confidence. Other themes the author identified were "community versus hospital based care" (p10), where more women in both groups were happier with community based care, and "relationships with different care professionals [and] very positive about the role of the midwives" (p10), with a preference for most care to be provided by them. This was more often the case for women receiving caseload care. Communication was an issue for many women, with those receiving caseload care feeling it was good, and the women in the *standard care* group having concerns about it. "Women receiving [*caseload midwifery*] care felt more supported and confident during labour" and birth (p10). The author concluded that the consistent and supportive care provided by the *caseload midwifery* program enhanced women's self-confidence, and allowed women to use the relationship with the midwife in a positive way.

In a Swedish qualitative study involving 18 women who had received midwife-managed care, women's experiences of their encounter with the midwife were explored. Berg *et al* (1996) identified three themes describing what women perceived as essential to a good relationship with the midwife, after asking each woman the question "Can you tell me about the encounter with the midwife/ midwives during delivery" (p12). The three predominant themes were "to be seen as an individual...to have a trusting relationship...[and] to be supported and guided on one's own terms..." (pp12 &13). The authors suggest that these themes did not have clear boundaries, and did overlap, and that most of all the presence of the midwife was an over-riding theme.

In a qualitative study in the United Kingdom where 32 women giving birth in a midwifery-led unit were interviewed in-depth about their experiences in labour, including interaction with the midwives, the core categories to emerge were the balance between personal control and the availability of support (Walker, Hall & Thomas, 1995). Sub-categories were things such as having "options and choices", "feeling informed" and having a "supportive environment and someone to trust and give confidence" (p120). In another British qualitative study of 32 women receiving community based *team midwifery* care, Lee (1994) found that the highest rated qualities women wanted in a midwife were that the midwife "inspires confidence and trust", provides "safe and competent care", is "approachable and friendly", "involves you in choices" and "is known to you" (p67).

2.4 The Midwife

The second major concept in the conceptual framework for the current study is *the midwife*, which will be explored in this section, incorporating the sub-concepts *professional and personal issues* and *relationship with the woman*. There will be a focus on how these sub-concepts affect the midwife and midwifery practice in a general sense, with a more focused look at this notion in relation to new models of care in *the care* section.

Various studies, reports and consumer surveys have highlighted the importance of the midwife in the provision of maternity services, and suggested that an expanded midwife role covering all aspects of pregnancy care is advantageous in providing women with an increased range of choices, as well as increasing women's satisfaction with the childbirth year and pregnancy outcomes (Expert Maternity Group, 1993; Health Department Victoria, 1990; National Health and Medical Research Council, 1996; Zadoroznyj, 1996). As such, it is important to understand what issues are pertinent to midwives and their practice, and how new models of midwifery care may impact on them.

2.4.1 Professional and Personal Issues

Prior to discussing the issue of the midwife in relation to new models of care, it is important to recognise and discuss current professional issues for midwives, as the current professional issues may in turn impact on how new models of midwifery care affect midwives and their practice. This is likely to be the case both for the midwives providing care within any new model, as well as the midwives who do not directly provide new models of care, but who remain as 'core' staff within maternity services.

When searching for literature which related to midwives' professional issues, job satisfaction and burnout, it appeared that the three factors were inter-related. Sandall (1996) suggests that "the way care is organised has a profound impact on whether midwives can combine work and family life and whether they suffer burnout" (p620). In a multiple site case study in the United Kingdom, involving three study sites, and in-depth interviews with 48 midwives, Sandall (1997) found that three key themes emerged relating to sustainable midwifery models which avoid midwife burnout, while still providing women-centred care. The most essential component was having "occupational autonomy", particularly related to working hours and being able to "balance home and work life" (p108). Two other key factors found to enhance midwives' work lives were the availability of "social support" (p110), particularly within the work team or environment, and the opportunity to "develop meaningful relationships with women" (p109).

There was no Victorian literature identified that compared caseload or team midwives job satisfaction with that of midwives providing *standard care*. However, a 1995 survey of 1000 randomly selected midwives in Victoria explored job satisfaction as well as current practice issues for midwives (Watson, Potter & Donohue, 1999). Of the 542 completed questionnaires returned, only 240 respondents were practising midwives. The sample came from diverse workplaces and geographical areas throughout Victoria, therefore may not be representative of the Victorian midwifery population in general. Some of the key findings were that less than 20% of the midwives said there was increased midwife satisfaction in the last five years, and less than one third felt there had been an increase in midwife autonomy. The most common areas of concern identified were "autonomy,

education and professional identity and status” (p222). The study found that most midwives were satisfied with their work, with aspects of the relationship with women and their families being the most satisfying component. The least satisfying aspects of their work, as reported by the midwives, were “poor continuity of care” and “early discharge”, with “budgetary issues”, “staff relations” and “lack of autonomy” being other areas of concern (p224).

In a pilot study of 82 nurse-midwives (a response rate of 47%) in the United States the top five factors affecting job satisfaction were “competency of other personnel... quality of client interaction... time to provide good care...amount of independence [and] involvement with care plan decisions” (Collins, 1990, p241). In contrast, in the United Kingdom, Flint (1992) reflects in a commentary on midwifery care, that lack of job satisfaction arising from providing fragmented care, compared with the continuity provided in caseload models for example, may be a cause of increased dissatisfaction, and the high rates of midwives leaving midwifery. A study of 200 Dutch midwives, from a stratified sample of different midwife work groups, found that a heavy workload, or being very busy, was not necessarily associated with increased midwife burnout (Bakker, Groenewegen, Jabaaij *et al*, 1996). These authors found that factors which may affect susceptibility to burnout are the presence social support for midwives, as well as the personal coping ability of different midwives.

2.4.2 Relationship With the Woman

Developing a relationship with the woman is a key ingredient of most of the new models of midwifery care, and in particular to *caseload midwifery*. The literature

supports this concept in terms of midwives' job satisfaction, with the opportunity to develop meaningful relationships with women and their families being a central component of midwives' satisfaction in two previously mentioned studies (Sandall, 1997; Watson *et al*, 1999).

There is however, some debate regarding what these relationships should entail. Should the relationship of the woman and the midwife be purely professional, or is there room for the relationship to develop to more than this? Leap (1994) suggests that friendship should be discouraged, in order to encourage the woman to establish her own support systems. Page (1995) supports the idea that the *caseload midwifery* model provides the opportunity for the midwife to be "both friend and professional to the woman and her family" (p146).

Further exploration of the relationship between the midwife and the woman is undertaken in sections 2.3.3 and 1.6, including discussion of the partnership model of midwifery practice, and women's views of their relationship with the midwife.

2.5 The care

It is important when looking at models of maternity care to identify "what factors related to the organisation of care contribute to women having more positive experiences" (Brown & Lumley, 1998b, p152).

This section examines the third major concept in the conceptual framework for this study, *the care*, as it relates to new models of midwifery care. The four sub-concepts chosen to support the exploration and description of this concept are *continuity models*, *midwives' views*, *outcomes*, and *sustainability*.

The majority of published research on midwife-managed models of care reports mainly on medical and satisfaction outcomes. Evaluation of how the new models affect the midwives providing the care has received less attention, as has the effect of the new models on other maternity service care providers.

2.5.1 Continuity Models

There are many reasons to expect that continuity of care will positively affect satisfaction and that “continuity [of] advice causes less confusion... forms the basis for a relationship in which the carer can provide individualised and sensitive care, [and that] the woman can develop trust, and a feeling of being special and treated as an individual” (Waldenström, 1998, p207).

Whilst many of the new models of providing maternity care have evolved in response to women’s requests for ‘continuity of care’ or having their care provided by a known caregiver, there are varied definitions (and much debate) regarding the term ‘continuity of care’ and what it means. This ranges from continuity of care by a single care provider, to continuity by a small team of known care providers.

Alternatively, it may mean continuity of philosophy among a group of care providers, where the carers have a shared view and understanding of how care should be provided, or where there is strict adherence to a common protocol (Hodnett, 1997a). Continuity of care may also have other implied meanings such as having a known midwife present at the labour and birth, or the same midwife present at all antenatal visits, or continuity in the postnatal period (Waldenström, 1998).

Not only is there debate around what continuity of care means, there is also debate around the issue of whether care providers should even attempt to provide continuity of care for women during the childbirth year. The debate centres around what is most

important: continuity of care given, such as philosophy, advice, attitudes and practices, or continuity of care giver. While some authors believe that continuity of care by one carer is the “gold standard” (Hundley, Milne, Glazener *et al*, 1997, p1273), others suggest that it is continuity of philosophy and consistent advice that is important (Green, Curtis, Price *et al*, 1998), and that enhanced continuity for some women may result in less continuity for others (Graham, 1997). Those that question the value of offering models where there is continuity of midwifery care suggest that attempting to provide continuity for women throughout pregnancy, birth and the postnatal period may compromise continuity during the antenatal and postnatal periods, which could otherwise be provided by a single carer (Farquhar, Camilleri-Ferrante & Todd, 2000). Further, Green *et al* (1998) suggest that providing a known carer in labour should not be the key determinant of a service, as this is a key factor impacting on midwives’ lifestyles. These authors propose that women are more concerned that “the midwife who delivers [assists] them is competent and caring” (p133) as opposed to being known to them.

In contrast with these views, many of the new models of midwifery care which provide increased continuity for women have been shown to increase women’s satisfaction with their care (Flint *et al*, 1989; Kenny *et al*, 1994; MacVicar *et al*, 1993; Rowley *et al*, 1995; Turnbull *et al*, 1996; Waldenström & Nilsson, 1993). However, it may be difficult to disentangle which aspects of the various models led to the increased satisfaction. That is, was it the continuity, or some other aspect of the new care? The reason for the lack of clarity is that other aspects of care may also be altered, compared to *standard care*, at the same time as continuity was introduced, such as philosophy of care, type of care provider and birth environment

(Waldenström, 1998). With many of the trials it is also difficult to determine if any differences in satisfaction between the women receiving the new model of care and *standard care* are due to midwife care versus care by other health professionals, or continuity of care compared with non-continuity (Hodnett, 1997a). An Australian RCT of *team midwifery* including 1000 women found that it was the continuity of care which was the factor leading to women's increased satisfaction, as other care aspects were not altered (Waldenström *et al*, 2000).

There are mixed reports on the benefits of continuity of care in a number of small descriptive studies and papers which discuss the complexities of the debate on continuity of care. Many appear to conclude that providing continuity of care may not always be the optimal model. A small cross-sectional postal survey of 136 women (a response rate of 55%) in the United Kingdom (sent two weeks after the birth) found that continuity of care was not a top priority for all women and that it was more important to the women to receive 'good quality' care at all stages of their pregnancy (Fellowes, Horsley & Rochefort, 1999). Flessig and Kroll (1997) examined the views of 25 community midwives regarding a new model of midwifery care which offered continuity. In a summary of the midwives' views, the authors concluded that while continuity should be aimed for, the first priority should be to offer "supportive, personal and consistent care" (p 19). In a non-randomised comparative evaluation of a *team midwifery* program, Hart *et al* (1999) examined the views of 256 women by postal questionnaire and 30 women by interview. The authors report that continuity during the pregnancy and a home visit in early labour were more important to women than continuity during labour and birth. Whilst the findings of small non-randomised studies such as those mentioned in this paragraph

should be interpreted with caution, it is important to weigh up the benefits of attempting to provide continuity of care, and note such findings when planning future research into models of maternity care.

It would appear that there are still unanswered questions about the concept of continuity of maternity care. Women have said they want the option of continuity for their care. The randomised trials appear to suggest that continuity increases women's satisfaction with care, yet a number of smaller studies question this in their local settings. An area for further research might be exploring this disparity, and comparing continuity in different components of pregnancy care, for example antenatal and postnatal continuity, with continuity which covers the pregnancy, labour and birth and the postnatal period (Walsh, 1995), and within different models of care. Likewise, an exploration of factors that influence women to choose private obstetric care would be an area for further research. Is continuity of carer a key reason?

2.5.2 Outcomes

It is a generally held view that safe care and a healthy baby are the priority for most women. In addition to providing increased choice, continuity and satisfaction for women, as discussed in previous sections of this review, it is important that midwife-managed models of maternity care are as safe as *standard care* models. Any maternity care should be as safe as is possible with regard to both the woman and the baby, and this includes not only morbidity and mortality, but other obstetric outcomes such as use of analgesia, length of labour and caesarian section rates. The RCTs in this review examine new models of midwife-managed maternity care, and

report the obstetric outcomes of these models compared with the standard options of care provided for women at the trial location. Whilst the focus of the current study is *caseload midwifery*, other midwife-managed models are included as there are often similarities in the models. This section discusses the obstetric outcomes of the women in the trials, referring only to the information from randomised trials, as this research design has the greatest ability to identify valid and reliable causal relationships (Polit & Hungler, 1989).

The trials selected for inclusion in this review as well as a recent meta-analysis of RCTs on new or midwife-managed models of pregnancy care have a number of key findings in regard to what medical or obstetric outcomes were experienced by women or their babies. The findings are discussed here, and details of the trials are shown in Appendix III. Of the total of the 12 trials included, only one trial found no statistical differences in interventions or medical outcomes (Waldenström *et al*, 1999).

In terms of obstetric interventions, the women in the new models, including *caseload midwifery*, had decreased rates of induction of labour (Turnbull *et al*, 1996; Waldenström *et al*, 1997; Waldenström & Turnbull, 1998), decreased rates of augmentation of labour (Biro, 2000; Flint *et al*, 1989; Waldenström *et al*, 1997; Waldenström & Turnbull, 1998), less electronic fetal monitoring (Biro, 2000; Hundley *et al*, 1994; Turnbull *et al*, 1996; Waldenström *et al*, 1997; Waldenström & Turnbull, 1998), decreased instrumental deliveries for vaginal births (Kenny *et al*, 1994; Waldenström & Turnbull, 1998), decreased use of episiotomy (Biro, 2000; Flint, Poulengeris & Grant, 1989; Harvey *et al*, 1996; Hundley, Cruickshank & Lang,

1994; Kenny *et al*, 1994), decreased interventions in labour overall (Rowley *et al*, 1995) and decreased caesarian section rates (Harvey *et al*, 1996; Homer *et al*, 2000b). It is difficult to know precisely to what these reductions are attributable. It may be that women were given more choices and options regarding their care in the new models, or it may be that receiving the new model of care actually affected women in some way so that their need for intervention was less. It could be argued that the philosophy and approach of the primary carers may have influenced outcomes.

Women in the midwife-managed models had less pharmacological pain relief in a number of the trials (Biro, 2000; Flint *et al*, 1989; Hundley *et al*, 1994; Rowley *et al*, 1995; Waldenström *et al*, 1997; Waldenström & Turnbull, 1998). Again, there is no clear evidence to say why this was so; if it was related to feelings of having support in labour, as previously mentioned (Hodnett, 1997b), having a known caregiver or possibly even other factors such as women feeling empowered and in control.

In one trial the women in the midwife-managed group had increased perineal tears (Kenny *et al*, 1994), which was in contrast to another trial in which the women had increased intact perineums (Turnbull, Holmes, Schields *et al*, 1996). A further trial found that women had an increased number of unsutured tears (Biro, 2000), but a decreased episiotomy rate. It is possible that the midwives in that trial were more likely to leave perineal tears unsutured. Likewise, the fact that the women in some trials had an increased length of labour if they were in the midwife-managed group (Flint *et al*, 1989; MacVicar *et al*, 1993; Waldenström *et al*, 1997) may be a

reflection of the practices of the midwives, or may be an outcome to do with some other extraneous factor.

Three trials reported a decreased length of hospital stay for women in the new models of care (Biro, 2000; Harvey *et al*, 1996; Kenny *et al*, 1994). A high rate of transfer out of midwife-managed models was noted in one trial, particularly with regard to women having their first baby (Hundley *et al*, 1994). This is an important issue to consider in terms of new models. For example, if women need medical input, should the model require them to transfer to *standard care*, as is the case with some models, or should the option for medical input and care be built in to the model? A typical example of this is *birth centre* care, where if women become higher risk, they are transferred 'out' of the model. In contrast, some models that don't require transfer have a system where the woman continues care with both her midwife team as well as the medical practitioner (Biro, 2000; Forster, 1998b; McIntyre, 2000), and this is particularly so in *caseload midwifery* models. This is an issue that could be explored in more depth in further research on models of midwifery care.

Ideally, if new models of care are to be rigorously evaluated, women and their infants' longer term health outcomes should be included, such as the seven year follow up of women and their children by Oakley *et al* (1996) when studying social support during pregnancy. Of the RCTs selected for inclusion in this review, other postnatal outcomes are discussed in some trials, such as ongoing maternal and infant health, particularly in studies where there was a longer follow up period. No statistical differences in women's health including depression and infant health were found in two trials (Waldenström *et al*, 1999; Waldenström *et al*, 1997), and one trial

found no difference in breastfeeding rates (Waldenström *et al*, 1999). Women in the midwife care group reported increased mastitis and sore nipples in a *birth centre* trial (Waldenström *et al*, 1997). It is difficult to know why this was the case, but it is possible that it may in fact mean that those women were more likely to report symptoms. In the trial conducted by Flint *et al* (1989), the women in the intervention group found it easier being a mother, and that they were more prepared for child care when their babies were six weeks old compared with the women in the control group.

No trials on midwife-managed care have shown any statistical differences in either perinatal or maternal mortality. A recent systematic review comparing continuity of midwifery care with standard maternity services found no statistical differences in health outcomes for the babies of women who had received the new models of care. There was a trend towards increased perinatal mortality in midwife-managed models of care although it did not reach statistical significance (Waldenström & Turnbull, 1998). Three recent trials in Australia have reassuringly decreased this trend (Biro, 2000; Homer *et al*, 2000b; Waldenström *et al*, 2000).

2.5.3 Midwives' Views

The impact of this new role [as primary care providers] on the professional and personal aspirations of the midwives involved is largely unknown and it is crucial we fully understand their experience ... to ensure the future success and expansion of... midwifery models (Brodie, 1996, p132).

In examining the literature on new models of midwife-led maternity care, it is important to examine the views of the midwives providing care within the new models, as well as the views of the midwives who continue to provide *standard care*.

The interaction between these two groups is a vital element in the ongoing success of a new model of maternity care.

2.5.3.1 The midwives providing midwife-managed care

Models of midwifery care which seek to provide continuity for women during pregnancy and birth often require a dramatic change in how midwives' work is organised. In many new models the midwives are "no longer working shifts allocated to wards and departments, but follow women through the system" (Page, 1995, p146). Brodie (1996) proposes that there is a lack of published research on the experiences of the midwives involved in new models and "little or no critical reflection ...on the implementation or maintenance [of these models] from [the midwives] perspective" (p132). She suggests this is crucial, given that one main reason cited in the literature for the discontinuation of new models is midwife dissatisfaction.

In many of the RCTs selected for this review there is limited evidence of how the new models affect the midwives; such as how the midwives view the working conditions, management support, professional issues, skill development and job satisfaction. Only two of the RCTs compared the midwives working in the new models with those providing *standard care* (Hundley, Cruickshank, Milne *et al*, 1995; McGinley, Turnbull, Fyvie *et al*, 1995). Some of the RCTs included an evaluation of the experiences of the midwives involved in the new models, without a comparison with the other midwives providing *standard care* (Brodie, 1997; Kenny *et al*, 1994; Rowley *et al*, 1995; Waldenström & Nilsson, 1993). One report which

addresses this issue could not be included in this review as it was published in Swedish only.

A number of non-randomised trials, studies and reports were identified which examined the views of midwives working in new models of care. To clarify what type of study is being referred to during the proceeding section, a brief list is provided here. There is a large comparative study (reported on by two authors) (McCourt, 1998; Page, 1995), reports on large midwife surveys (Sandall, 1997; Stock & Wraight, 1993), small descriptive studies of new models in practice (Black, 1992; Lee, 1994; Ramsay, 1996), personal views of midwives working within new models (Docherty, 1995), and reflections on implementing new models from management, professional and staff development perspectives (Browne, 1994; Leap, 1996; Lewis, 1995; McGinley *et al*, 1995; Wise, 1996).

2.5.3.1.1 Education required by midwives working in new models

When midwives move from working in *standard care*, to working in midwife-managed care models, there may be many changes they need to make during the transition period. Midwives may not initially be confident and competent to act as ‘lead’ professionals, and this issue may need to be addressed when setting up midwife-led models, as well as in the midwifery education programs (Lewis, 1995). In many trials, as well as in units implementing new models, midwives needed to ‘upskill’ or refresh their midwifery knowledge in areas where they perceived they had a deficit (Docherty, 1995; McGinley *et al*, 1995; Wise, 1996), and may also have had to ‘unlearn’ some ways of practising (Ramsay, 1996). Midwives often need to take on new, and sometimes more, administrative tasks when working in new models

of care (Turnbull *et al*, 1995). Some reports also talk about not only the initial upskilling of midwives, but that midwife-managed models should, and possibly do, encourage ongoing professional development (Page, 1995).

2.5.3.1.2 Midwives working in midwife-managed models: their views and experiences

Midwives have described many positive experiences and benefits as a result of working in midwife-managed models. Many papers discuss how midwives working in the new models have a greater sense of working as a team (Black, 1992; Docherty, 1995), including experiencing increased professional support (Turnbull *et al*, 1995) as well as enjoying the increased contact with other midwives (Black, 1992). These aspects may suggest that in *standard care* contexts, midwives may feel less part of a group who work together toward a common goal. In contrast, one author referred to a sense of isolation working in some midwife-led models (Docherty, 1995), and highlighted the need for attention to both formal and informal communication channels between ‘team’ members.

Another area commonly described in a positive way by midwives working in *team* and *caseload midwifery* models is the increased use of, and confidence in, their skills as a midwife, as well as increased knowledge and opportunity for professional development (Black, 1992; Docherty, 1995; Stock & Wraight, 1993). This is illustrated by one author, who stated that she had “more confidence than before [in her] own informed professional judgement” (Docherty, 1995, p231).

Interestingly, midwives in new models were positive about the same aspects of their work which are known to reduce burnout, such as increased autonomy and responsibility (Black, 1992; Turnbull *et al*, 1995). Increased job satisfaction also appeared as a common finding (Black, 1992; Brodie, 1996; Stock, 1994; Turnbull *et al*, 1995). Correspondingly, factors found to increase the satisfaction of midwives in the new models are increased autonomy and having responsibility for management decisions (Hundley *et al*, 1995; Stock, 1994), as well as being able to provide continuity, and 'better' care (Brodie, 1997; Hundley *et al*, 1995; Stock, 1994).

In the same way in which many factors increased the job satisfaction of midwives working in team midwifery and *caseload midwifery* models, a number of factors lead to decreased midwife satisfaction. Increased medical involvement in care as well as too many midwives involved with care have both been shown to decrease midwives' satisfaction (Hundley *et al*, 1995). Likewise, a perceived lack of trust in midwives' judgement by medical and other staff (Brodie, 1997; Hundley *et al*, 1995), as well as a perceived lack of management support (Brodie, 1997) can negatively affect midwives working in new models. Participation in new models lead to increased stress for some midwives (Turnbull *et al*, 1995).

2.5.3.1.3 Rosters and 'on call' for midwives working in team and caseload models

Many of the new models entail different work patterns to the standard models, and this is one of the most contentious issues in the debate around models of care, particularly in relation to models which require some degree of 'on call' work. In the models which include an 'on call' component, the midwife may be called in to work when a woman she is caring for is in labour, or when she is rostered 'on call' for any

labouring women receiving the particular model of care (Biro, 2000; Flint *et al*, 1989; Kenny *et al*, 1994; McCourt & Page, 1996). 'On call' is of particular importance in the *caseload midwifery* model, as one of the main components of the model is to provide care by a known midwife during labour and birth. Other models, such as *team midwifery* models, often do not have an 'on call' system, but instead ensure that at least one midwife in the new model is rostered on at any given time (Homer *et al*, 2000b; Rowley *et al*, 1995; Turnbull *et al*, 1995; Waldenström *et al*, 1999). Either system may require some adjustment to the midwives' previous work patterns. These adjustments can affect midwives in positive and negative ways, and there may be a transition period (Docherty, 1995, p231). McCourt (1998), in a study of 16 caseload midwives' work diaries, found that it took six to nine months, as well as appropriate peer and management support, to adjust to working in a system where 'on call' and flexible work hours were intrinsic. In a Glasgow trial where the midwives followed a *caseload midwifery* model, the midwives chose not to take on an 'on call' component, but altered their working hours to maximise opportunities for continuity, particularly through labour (McGinley *et al*, 1995). These authors suggest that having input into roster configurations, trialing them and having the ability to change the roster maximises the way in which the midwives can have some control over the processes.

The views surrounding the 'on call' issue appear to be becoming more polarised in the current debate, particularly in the United Kingdom. Some authors suggest that high numbers of women achieve satisfaction with care without midwives' working 'on call' (Green *et al*, 1998), and that being available for a number of women when they go into labour is very intrusive on midwives' lives (Green *et al*, 2000). It may

be however, that the issue is not straightforward. Sandall (1997) found that midwives who had developed a relationship with a woman were not as concerned about 'on call' issues as the midwives who were 'on call' two to three nights per week for women whom they did not know. A small study in the United Kingdom where 12 midwives were interviewed in-depth found that being 'on call', particularly at night, waiting to be called, did affect midwives, although they almost all rated their job satisfaction highly, and felt that a supportive team and getting to know the women were important aspects for them (Lee, 1994). The issue of midwives being unable to relax when off duty, and their work impacting on their domestic and social lives, was also highlighted as a potential problem in a case study of team midwives conducted by the by the Institute of Manpower in the United Kingdom (Stock, 1994).

In a non-representative sample of 100 midwives who answered a journal invitation to participate in research in the United Kingdom (Leap, 1994), 70% said they felt that "caseload practice [was] the way forward for midwifery" (p130), but were concerned about the potential for burnout, and many knew instances where midwives had to take on unrealistic client loads. Of those midwives already involved in a caseload system, there was much job satisfaction, but concern regarding workloads, flexibility and pay rates. In another report the midwives said that the increased flexibility required by new models was a 'trade off' with increased autonomy and job satisfaction (Stock & Wraight, 1993). The authors considered it crucial that there be a choice to work in these models, and that such a work pattern would not suit all midwives.

2.5.3.1.4 Conflict between midwives in team and caseload models and other staff

Conflict between midwives working in new models and the staff in *standard care* models has arisen as an issue in some reports (Brodie, 1997; Ramsay, 1996).

Midwives in new models, or the new models themselves, may be seen as a threat by medical staff, in that the midwives may be taking on work otherwise done by them (Ramsay, 1996). In a qualitative evaluation of a *team midwifery* model in Brisbane, midwives were surprised by the lack of support from other staff, both peers and administration (Ramsay, 1996). In two other trials it was reported that team midwives had to frequently respond to “criticisms about their role or work practices” (Brodie, 1997, p49). Brodie argues that the team midwives she studied developed an allegiance to the women they cared for, which caused conflict with the other ‘non-team’ midwives, who maintained allegiances to particular work areas, colleagues and the organisation (Brodie, 1997).

2.5.3.1.5 New models of midwifery care in relation to career structure

An issue which is important to consider for midwives working in new models of care is that of career structure or development, given that many of the new models result in a “flatter structure” (Stock, 1994, p33). This could indicate that there may be less opportunity for career advancement for midwives working in these new models of care. This is particularly relevant with regard to salary structures and rates in the Australian context, where the current Federal Nurses’ Award rates of pay do not reflect changes in some midwives’ work arrangements and hours. The Award assumes and promotes a salary structure where shift lengths are fixed, as are position descriptions and roles. In many new models of midwife-managed care, particularly *caseload midwifery*, the midwives work very flexible hours, well outside of those

specified by the Nurses' Award. It may be, for example, that a midwife could work 15 hours one day, then only a few the next, then be 'on call' for the following two days, yet still not be working more than expected. Some workplaces have negotiated individual flexible arrangements between the ANF (Australian Nursing Federation) and their respective workplaces, coming to an agreement satisfactory to the midwives, the hospital and the ANF (Gumley *et al*, 1997; O'Donnell, 1998).

2.5.3.2 The midwives providing standard care

In the same way it is necessary for the midwives to be happy working in a new scheme, it is vital that those not directly involved also feel that the scheme or model is worthwhile, is working well, and is not impacting negatively on their sphere of practice. It is arguably essential for this situation to be the case if a new model is not to be constantly undermined and therefore constantly under external threat.

The question relating to the views and experiences of the midwives providing *standard care* is examined in some of the RCTs included in this review. Turnbull *et al* (1995) found that 41% of those midwives not involved in the new model of care considered it could have been implemented better, and a significant number perceived a 'them and us' situation had developed. Ten percent of the midwives described the new model as disrupting their clinical practice. However, all the 'new model' midwives and 70% of the 'standard model' midwives considered that the implementation of this type of model of care was the "way forward for midwifery" (p117) although reasons for this were not elaborated upon.

Other descriptive studies have also looked at the views of the midwives providing *standard care*. There appears to be some major areas of conflict. These include *standard care* midwives as well as medical practitioners not perceiving the skill levels of the midwives involved in the new models to be adequate (Bowman, Hunter & Wotley, 1997; Brodie, 1996; Ramsay, 1996), *standard care* midwives believing that women are having too much choice, and women seen as becoming too assertive and demanding in what they want from their care (Bowman *et al*, 1997).

Many of the new midwifery models include care for women throughout the antenatal and labour and birth periods, with limited input in the postnatal period. In almost all models, it is necessary for the *standard care* midwives to provide back-up, or ‘core’ staffing for the women receiving care in the new models, usually in terms of labour, birth and postnatal care. Hall (1996) suggests that this reliance on ‘core’ ward staff to provide care, particularly in the postnatal area, can lead to difficulties in working relationships between the two groups of midwives, as well as tension and communication problems. It may also lead to a ‘them and us’ situation, and ‘core’ staff may feel ‘threatened’ by the new models (Stock, 1994).

2.5.3.3 Midwives’ views: conclusion

Preparation for change, and adequate practical organisation of any new model of midwifery care is vital (Wise, 1996). In terms of the midwives, it would be optimal to increase job satisfaction and practice competence whilst minimising stress during any transition. Turnbull *et al* (1995) suggest this can be done if “change is managed in a systematic manner which involves the midwives” (Turnbull *et al*, 1995, p119). Brodie (1997) further suggests that “support and leadership from the hierarchy” is

imperative to “withstand the early difficulties of implementing and subsequently maintaining and integrating change” and that “while criticism was common initially, this decreased over time as trust developed and the programs became established (p50).

2.5.4 Sustainability

Evaluation of new models of midwifery care in terms of sustainability may be complicated by the fact that it may be a different type of midwife who will choose to work in these models. Turnbull *et al* (1995) suggested that “innovative models of care may not be generalisable to the profession as a whole because the success of such systems relies on them being staffed by the more motivated midwife” (Turnbull *et al*, 1995, p112). It may be difficult to support or refute this view, as little literature identified discussed these issues, and the construct of motivation is a complex one. This does not however suggest that new models are not sustainable, as presumably there would always be a percentage of midwives seeking to work in this way. Interestingly, Turnbull *et al* (1995) found that prior to their trial, the main difference between the midwives who volunteered for the intervention and those who did not was that the volunteers were more likely to have a negative attitude toward their current role (Turnbull *et al*, 1995). The literature also suggests that midwives who choose to work in new and innovative models tend to be more junior, with less years experience (Turnbull *et al*, 1995) as well as younger (Stock, 1994). It could be argued that this may reflect current midwifery education trends, which possibly encourage these new approaches in maternity care, or that midwives who are older, or more experienced have other priorities than their profession. It could also be that

midwives who are more experienced are grounded in an earlier midwifery education philosophy or paradigm of maternity care delivery.

McCourt (1998) describes how midwives manage their time in a caseload model, and suggests that this model is sustainable within the National Health Service (NHS) in Britain, assuming a full time midwife has a caseload of 40 women. She does not include time spent 'on call' (but not called in) as part of the hours the midwives are required to work each week, yet this very issue could potentially be the one which many midwives involved in providing caseload care (or thinking of becoming involved) find the most disruptive to their lives. That is, the 'on call' issue always in the background, possibly acting as a social constraint.

An important question regarding sustainability is to ask midwives working in new models of maternity care if they wish to continue working in the model. Within the trial context data on this issue was rarely addressed; an important omission which should be addressed in future research or publications of current research. In Turnbull *et al's* (1995) study only two midwives left the model, the reason given was to obtain professional promotion. This data was collected for only 15 months however, and more midwives may have left after that time. One conclusion in this report was that for success, midwives should be treated as individuals, and that "managers should be sensitive to the needs of each [midwife] in the team" (p117).

An associated issue is that of midwives' sick leave. A number of trials have reported significantly less sick leave among midwives working in the new models compared to those in *standard care* (Kenny *et al*, 1994; Rowley *et al*, 1995). Stock and Wraight

(1993) suggest that this may be related to a reluctance to let the other team members down. Another argument is that such an outcome may suggest midwives are happier working in these new models, and therefore are less prone to absenteeism.

2.6 Summary

The Australian and international literature clearly demonstrate that women want choice, continuity and control in the important life events of pregnancy and childbirth. As recently as the late 1980s and the 1990s, it is evident from consumer surveys in Victoria that not only have there been limited options and choices in maternity care, but even when different options existed they were rarely discussed with, and offered to, women. Related to this lack of choice has been a lack of availability of, and access to, midwife-managed care. These trends are gradually changing, and many new options of maternity care have developed for women, although the literature suggests that women in rural areas continue to have limited choice.

Evaluation of midwife-managed care has been a focus of research into maternity care in the 1990s, with a number of RCTs conducted comparing new models of care with the existing options. These trials have demonstrated increased satisfaction for the women receiving the new types of care, as well as safe medical and obstetric outcomes. Areas that have received less research attention are the effects of the new models on the midwives providing the care as well as on the midwives continuing to provide the standard options of care.

Caseload midwifery is a new form of maternity care that attempts to address the evidence on what both women and midwives value in maternity care, that is the opportunity to form a relationship, and for maternity care to be a partnership between a woman and midwife. Further, it offers another option of maternity care for women. To date, *caseload midwifery* has been evaluated in a small number of randomised controlled trials, as well as in smaller descriptive studies and has been shown to increase satisfaction for both women and midwives. There is arguably still a lack of evidence regarding how this model of care affects all key stakeholders, and an important question regarding the caseload model is the aspect of ‘on call’ work, and its impact on both the midwives and the system. Further research into this area as well as those mentioned above will contribute greatly to the ongoing management and sustainability of new models of maternity care.

CHAPTER THREE: the research process

3.1 Introduction

This study was an exploration of the effect of a recently implemented new model of maternity care, *caseload midwifery*, as an option of care at a maternity facility in metropolitan Melbourne. The study aimed to explore the views and experiences of the women choosing this option of care, the midwives who provided the *caseload* care and the midwives not involved in providing caseload care. The research question was: what are the views and experiences of women and midwives, associated with a recently implemented *caseload midwifery* model in a Melbourne metropolitan maternity facility?

A non-experimental embedded case study design (Yin, 1994) was used to answer the research question. Although there is limited data on the effects of midwife managed models of maternity care on midwives, particularly from randomised trials (Brodie, 1996), and a recent systematic review of RCTs on continuity of midwife care versus *standard care* suggested more trials were needed (Waldenström & Turnbull, 1998), the scope of the current study was not considered large enough to conduct a randomised controlled trial with sufficient power to test for statistical differences.

In the current case study there were three sub-units of analysis. *Sub-unit one*: four women receiving *caseload midwifery* care. *Sub-unit two*: four midwives involved in providing caseload care. *Sub-unit three*: midwives not directly involved in caseload

care. Data collection involved semi-structured interviews (*sub-units one and two*), which were audiotaped, and a structured questionnaire for the midwives in *sub-unit three*. A description of the research design, including the research method, sample and recruitment of the subjects, description of the setting, data collection tools and techniques and data analysis, together with the ethical considerations will be described in this chapter.

Prior to the commencement of data collection ethics approval was obtained from RMIT University and Box Hill Hospital Human Research and Ethics Committees (see Appendix IV).

3.2 Research method

A case study is an in-depth investigation of an individual, family, group, or organisation of a larger social unit [which] investigates a contemporary phenomenon within its real life context (Woods & Mitchell, 1988, p156).

A non-experimental embedded case study design (Yin, 1994) was chosen to explore the effect of a recently implemented *caseload midwifery* model in a Melbourne metropolitan maternity facility. The case study methodology seemed appropriate because of its ability to investigate a phenomenon within its real life context, using multiple data sources to explore the effects of implementing a particular program (Yin, 1994).

The focus of a case study is a single unit of analysis and its purposes may include describing and exploring relationships between phenomena (DePoy & Gitlin, 1994).

The case study can attempt to “analyse and understand the variables that are

important to... the subject” (Polit & Hungler, 1989). Case studies have a contemporary focus, emphasise contemporary experience, are conducted in a setting not controlled by the investigator and use multiple data gathering methods (Woods & Mitchell, 1988). While case studies are usually non-experimental in design and do not test hypotheses, information may be gained to generate hypotheses for further studies (Nieswiadomy, 1987). They can elicit in-depth information on “why [a subject] thinks, behaves or develops in a particular manner” (Polit & Hungler, 1989, p155). “With their focus on individuals and their generally holistic approach, case studies help bridge the gap between research and practice in nursing” (Polit & Hungler, 1989, p156).

3.2.1 The Unit of Study

A ‘case’ may be an individual, an organisation, a community, or specific groups that are examined as a whole (DePoy & Gitlin, 1994). Clarifying the central focus of the study by carefully describing the unit of analysis is an important element of the design (Woods & Mitchell, 1988). Holistic studies look at the unit of analysis as a whole, whereas embedded studies look at the parts that make up the whole and relate them to the function of the whole. Single case studies look at one unit only for analysis, while multiple case studies look at a number of single units (DePoy & Gitlin, 1994).

This study uses a single embedded case study design (Yin, 1994), that is, a single unit of analysis with specific sub-units examined separately. The unit of study was the *caseload midwifery* model at a Melbourne metropolitan maternity facility, with three sub-units of analysis to achieve data triangulation (Yin, 1994).

These sub-units were:

- *sub-unit one*: four women receiving *caseload midwifery* care;
- *sub-unit two*: four midwives involved in providing caseload care;
- *sub-unit three*: all midwives on the unit not directly involved in caseload care.

Data collection, which will be discussed in detail later in this chapter, involved different data collection tools and techniques for each *sub-unit*. Audiotaped semi-structured interviews were used for *sub-units one and two*, and a structured questionnaire for those in *sub-unit three*. Semi-structured interviews seemed an appropriate method of data collection for *sub-units one and two* in order to obtain an in-depth perspective of the model of care from the viewpoint of the two key participants. A survey questionnaire design was chosen for the midwives not directly involved in providing caseload care, with both closed and open-ended questions.

Following data collection, data from each sub-unit was analysed and discussed separately, then the results were then reviewed as a whole, looking for patterns and common themes and outcomes (Yin, 1994).

3.3 Sampling method and numbers

The study was conducted in a maternity unit in metropolitan Melbourne (Birralee), which has approximately 2,500 births per year. The majority of women booking in to the unit access public maternity care, and the women come from a broad range of cultural backgrounds. It is a teaching hospital, catering for medical, nursing and midwifery students, as well as providing medical obstetric training.

The sampling technique used for this study was purposive, that is, aiming to obtain data from three key groups of people who were potentially affected by the introduction of the *caseload midwifery* model. It was important to include the views and experiences of subjects from each of the three *sub-units*, yet necessary to limit numbers to some extent in view of the study size.

3.3.1 Sub-unit one (the women)

Two primiparae and two multiparae who were participating in *caseload midwifery* care were recruited from the pool of women who had chosen *caseload midwifery* care. It seemed important to have the views of both groups of women, as those who had a previous baby may have a different perspective from first time mothers. That is, they would have previously experience and views on maternity care, which they may compare to the caseload model. At the time of recruitment to the study, twelve to sixteen women per month were enrolled for *caseload midwifery* care, with more women wanting the model than the availability of midwives allowed.

Exclusion criteria were multiparae who had previously had *caseload midwifery* care, and women who were unable to understand spoken English. Women were also excluded if they experienced a fetal or neonatal death, had a ‘very sick’ baby (for example requiring admission to the neonatal intensive care), or if they had experienced a major medical problem (for example severe pre-eclampsia).

Participation in the study was voluntary, and informed written consent was obtained from the women (see Appendix V). Prior to entering the study each woman who was

approached was given a written plain language statement explaining the project (see Appendix VI). A starting date was chosen for recruitment, and the next four women who gave birth within the caseload system were approached and invited to join the study. If any woman did not wish to be included, the next eligible woman was approached.

Recruitment of women to the study took place in September 1999, and four women who gave birth sequentially in the caseload scheme who were asked to participate. All agreed to do so. One woman was recruited to the study during her hospital stay, following the birth of her baby, and a further three were recruited by telephone soon after discharge from hospital to home, as the researcher was unavailable to undertake recruitment when they were in hospital. These women were telephoned as soon as possible following the birth and subsequent discharge home.

The women were given the option of interviews in their homes, or another place of their choice, to minimise any “inhibitors of communication” (Armstrong, White & Saracci, 1992, p178). Written and verbal consent was gained in hospital prior to discharge home for the woman who was recruited in hospital, whereas in the other three cases verbal consent was gained by telephone, then in writing when the researcher arrived at the woman’s home prior to interview.

Issues regarding data collection and recall of issues around birth are discussed further in ‘data collection procedure’.

3.3.2 Sub-unit two (caseload midwives)

A purposive sample of four caseload midwives was recruited. At the time of recruitment to the study, five midwives within the maternity unit had worked within the caseload model taking on a 'full' caseload. Occasionally these midwives worked a regular shift on the unit if their work hours were too few in the caseload scheme, but the majority of their work time was committed to providing caseload care. Other midwives on the maternity unit had filled in for annual leave, and/or taken on an occasional caseload client, which was an option within the unit, as an addition for midwives working as part of the core staff. For the purpose of this study the priority was to recruit the midwives who had the most experience of working in the caseload model. The inclusion criteria therefore was that the midwife had been involved in working with a 'full' caseload.

The eligible midwives were invited to participate in the study sequentially until four midwives agreed. Verbal consent was obtained at the time of agreement to participate in the study and a written plain language statement explaining the project was given to each midwife (see Appendix VI). Written consent was obtained from the midwives prior to commencing their interview (see Appendix V).

The interviews of both the midwives in *sub-unit two* and the women took place in December 1999.

3.3.3 Sub-unit three (midwives not directly involved in caseload)

All midwives in the maternity unit who were not involved in providing caseload care were considered eligible to participate, and were invited to complete a questionnaire.

Exclusion criteria was defined as either current participation in providing caseload care, or having previously cared for more than three women in this way. Eighty-eight midwives were employed in the unit at the time of recruitment and data collection. Sixty-eight midwives were identified as eligible for inclusion in *sub-unit three*. Fourteen midwives were considered ineligible as they were currently or had previously participated in providing a small amount of caseload care, and the five midwives who were providing ‘full’ caseload care were excluded. One midwife was on maternity leave, and also excluded, as she may have had limited exposure to the caseload model. Written consent was considered necessary for all participants in this case study by both the University and Hospital Ethics Committees, and was therefore obtained, as described further in the section 3.5 (see Appendix V).

3.4 Data collection tools: design and piloting

3.4.1 Validity and Reliability

Issues of validity and reliability will be discussed in the following sub-sections in regard to each tool used, with more generic issues and definitions discussed here.

Validity is the “degree that an instrument measures what it is supposed to be measuring” (Polit & Hungler, 1989, 246). There are several types of validity:

- *Content validity* refers to if the questionnaire or instrument being used actually asks all the questions on that topic which an expert from a similar field would expect to be included. Polit and Hungler (1989) suggest that as there are no

objective methods for ensuring adequate content coverage of an instrument, the use of experts (in the area being examined) to review the instrument is important.

- *Construct validity* refers to the question of whether the tool being used measures the construct being studied, and becomes more difficult to establish as the concept(s) become more abstract (Polit & Hungler, 1989; Yin, 1994). In case studies, there are three ways to increase construct validity: to use “multiple sources of evidence [to encourage] convergent lines of enquiry”, to “establish a chain of evidence”, and to “to have the draft case report reviewed by key informants” (Yin, 1994, p34).
- *External validity* is the ability of a study to be generalised to other settings or samples (Polit & Hungler, 1989; Yin, 1994). In general the question of external validity is related to research and sampling design, for example if the sample characteristics are representative of the population characteristics, then the generalisability increases (Polit & Hungler, 1989). In regard to case studies, Yin (1994) argues that while survey research relies on statistical generalisation, (based on a representative sample), case studies concentrate on analytical generalisation, and the investigator will try to generalise the results to some broader theory. He says that the generalisation is not automatic, and the theory should be tested through replications of the findings in similar settings. He calls this “replication logic” (Yin, 1994, p36).
- *Internal validity* is the extent to which it is possible to say that there is a relationship between the independent and dependent variables (Polit & Hungler, 1989), that is that event x led to event y . Research with an experimental design has a high degree of internal validity because of procedures which make the groups as similar as possible, such as randomisation, exclusion and inclusion

criteria. Yin (1994) suggests that internal validity is only relevant to experimental designs where a cause and effect relationship is being tested and that in case study research, “the concern over internal validity can be extended to the broader problem of making inferences, ...and... that case studies involve making inferences every time an event cannot be directly observed” (Yin, 1994, p35). Case studies utilise several methods to describe events, such as rival explanations, interview and documentary evidence, convergent evidence, pattern matching, explanation building and time-series analysis.

Reliability is the “degree of consistency with which [an instrument] measures the attribute it is supposed to be measuring” (Polit & Hungler, 1989, p242). A reliable tool should be both consistent and accurate in its measurement of the attribute being studied. The three main aspects of reliability are:

- *Stability*: the extent to which the same scores are obtained if testing the same subjects twice (Polit & Hungler, 1989).
- *Internal consistency*: this is about ensuring that all parts of an instrument are consistently measuring the critical attribute which the tool sets out to measure (Polit & Hungler, 1989).
- *Equivalence*: this refers to the reliability of two different raters assessing a subject similarly, also known as inter-rater reliability (Polit & Hungler, 1989).

With regard to case studies, reliability assumes that if another investigator were doing the same case study again, and followed the same procedures, the other investigator would arrive at the same findings and conclusions (Yin, 1994). Yin (1994) suggests that the way to deal with the reliability issue in case studies is “to

make as many steps as operational as possible and to conduct research as if someone were always looking over your shoulder” (p37).

3.4.2 Sub-unit one (the women)

Prior to the interview, all women completed a background questionnaire (see Appendix VII). This tool included 10 questions on the women’s demographics and social background (age, marital status, education, country of birth, income, parity and cigarette smoking). It was piloted to ensure content validity and readability, first by five midwives (not involved in the study), and then by five postnatal women (not in the potential sample pool). The midwives were asked to comment on the content as well as the structure and language and the women were asked to answer the questionnaire then comment on any issues. Minor changes were made following feedback from the midwives, then final adjustments made following comments from the women. In question six, which addressed level of education, options were added in regarding ‘currently completing’ a degree, diploma or apprenticeship.

The interview schedule to collect data from the women was developed by the researcher based on the key concepts being studied (see Appendix VII). Questions focused on the woman’s experience of her care during pregnancy, as well as the care she received by hospital staff after the baby was born, both in hospital and at home afterwards. The interview schedule was reviewed by five midwife experts for readability, as well as to maximise content and construct validity. Reviewers were asked if the interview questions reflected the questions on that topic which they (an expert from a similar field) would expect to be included, and if they were representative of the topic and concepts being examined (Polit & Hungler, 1989).

Two pilot interviews were conducted (one audiotaped) with women from similar populations to the study sample who were not eligible for inclusion in the study. The women were asked to comment on the clarity and content of questions, including any questions that they considered irrelevant. They did this during and following the interviews. After both stages of piloting some questions were rephrased and some were removed.

3.4.3 Sub-unit two (caseload midwives)

Each midwife completed a background questionnaire (see Appendix VIII). It included questions on age, midwifery education, experience and qualifications.

These questions were designed to gain basic background information on the participating midwives, but included no questions on social demographics, such as if the midwife had a partner or children. In retrospect it may have been beneficial to include questions on social aspects of the midwives' lives, as *caseload midwifery* does impact on these areas. The questionnaire was reviewed by five midwife experts not involved in the study, and then by five midwives from the sample population who were not eligible for inclusion in the study. Only minor changes were made on the tool based on feedback received.

The midwives' interview schedule (see Appendix VIII) was developed to specifically examine key concepts that had been identified during the literature review and subsequent development of the conceptual framework. This included the midwives views of the caseload model, professional issues, the effect of working as a caseload midwife on their personal life, their views on the relationship with the woman, their views on the interaction with other staff in the maternity unit and if they planned to

keep working in the model. The interview schedule was reviewed by five midwife experts, as discussed regarding the women's interview schedule above. Two pilot interviews were conducted (one audiotaped) with midwives from the sample population who were not eligible for inclusion in the study. The midwives were encouraged to comment on any questions that were difficult to understand or considered irrelevant, or if any other questions should be added. They did this during and following the interviews. The midwife listened to her taped interview for accuracy of her answers and further comment. After both stages of piloting some questions in the interview schedule were rephrased slightly.

3.4.4 Sub-unit three (midwives not directly involved in caseload)

A questionnaire designed to collect quantitative and qualitative data in three areas was developed for the midwives in *sub-unit three* (see Appendix IX). Question structures included fixed response questions with pre-coded alternatives, Likert-type scale questions, questions where more than one response option and open-ended questions to gather qualitative information. Background information such as age, qualifications, and views on professional issues was collected in the first section. The next section aimed to identify knowledge of, and views about the *caseload midwifery* model. The final section allowed further comment in open-ended questions, and the midwives were asked if they would like to work in this model. Piloting involved five midwife experts (not involved in the study) reviewing the questionnaire for relevant concepts, appropriateness of the design, meaningfulness of questions, appropriateness of language and for any other comments. Minor adjustments were made based on the feedback received, then the questionnaire was sent to 20 midwives working in a nearby midwifery unit, where the caseload model was also

operating, for completion and comment. Fifteen questionnaires were returned, and only minor adjustments were made based on the comments received.

It was initially considered that the scale items should undergo Cronbach's alpha coefficient testing (Polit & Hungler, 1989) to determine internal consistency of the items, as part of establishing the reliability of the tool. Statistical consultancy on this matter suggested that the range of issues explored in the questionnaire did not lend themselves to such a reliability measure, as almost each question explored a different issue. Brown and Lumley (1997), in discussing questionnaire design for the 1993 Survey of Recent Mothers talked about why they chose not to assess their survey for reliability. They mentioned the importance of "uncovering variability" (p271) among responders; that this may not always fit into a predefined and 'reliable' scale.

3.5 Data collection procedure

Data collection took place between November 1999 and January 2000.

3.5.1 Sub-unit one (the women)

The decision regarding the timing of the interview with the women who had received caseload care was based on a combination of the literature findings on the subject, in conjunction with the pragmatic approach necessary for completion of the research. If women are asked about birth or care around birth too soon after the event, they are potentially still in a period where a 'halo effect' colours their attitudes to care (Brown & Lumley, 1997). Some references even suggest that this 'halo effect' around birth may last up to six months (Bennett, 1985) or that data collected in the 6

months after birth may not elicit any negative feelings about birth (Hundley *et al*, 1997). These views are in contrast to the issues around retrospective data collection, such as recall bias. That is, the further from an event, the less the accuracy of recall of that event (Armstrong *et al*, 1992). Bennett (1985), however, found that women's recall of birth events was as accurate two years later as it was three weeks after the birth. Armstrong *et al* (1992) suggest that retrospective recall is greater for events with a high impact on the subject's life, which is likely to be the case regarding pregnancy and childbirth. These authors also propose that a personal interview is the optimal method of data collection to obtain retrospective personal information (Armstrong *et al*, 1992). It could be argued that exploration of outcomes such as breastfeeding and maternal physical and emotional wellbeing necessarily require an adequate time period if there is to be any exploration of these as ongoing issues, compared to immediate issues only (Brown & Lumley, 1997).

It was decided to interview the women approximately two months after the birth, which allowed some time between the birth and the data collection, while being feasible within the time constraints of the researcher as a student.

Data were collected in two ways. Each woman filled out a brief questionnaire related to demographic details, and then participated in a semi-structured interview at a place of her choosing. The focus of the questions was the woman's experience of, and satisfaction with, care during the childbirth year, with open ended questions allowing further comment. All interviews were audiotape recorded. To enhance data validity, any issues or comments that were unclear to the interviewer were clarified during the interview. Notes were made by the researcher of any thoughts about, or perceptions

of the interview after leaving the woman's home, to enhance data analysis and meaning (Yin, 1994). The tapes were transcribed verbatim prior to analysis. Ideally the women would be asked to read through their transcribed interviews to establish that the answers they gave were what they intended, thereby enhancing reliability (Yin, 1994), however this was not included in the original consent and explanation, and time constraints and project scope also precluded this.

3.5.2 Sub-unit two (caseload midwives)

Data were collected in two ways. Each midwife completed a questionnaire on background details about herself. A semi-structured interview was then undertaken at a place and time convenient to the midwife. The focus of questions was the midwives' experiences of, and views on, caseload care. All interviews were audiotaped, and notes were made of the researcher's perceptions of the interview (as above). The tapes were transcribed verbatim prior to analysis. Following the transcription, to enhance reliability, the midwives were asked if they would read through their transcribed interviews to establish that the answers they gave were what they intended (Yin, 1994).

3.5.3 Sub-unit three (midwives not directly involved in caseload)

Data collection was via a structured questionnaire, with mainly closed-ended questions with pre-coded alternatives and Likert-type scale questions. The focus of questions was the midwives' experiences of, and views on, *caseload midwifery*, as well as some demographic questions. The questionnaire was sent via the internal workplace mail system to all midwives who were identified as eligible. It was sent

with a plain language statement (see Appendix VI) and a consent form (see Appendix V). It was requested that the questionnaire be returned to the researcher in the stamped addressed envelope provided. The consent was to be sent back separately via the internal mail system to allow confidentiality. To enhance the response rate, two reminder letters were sent to the midwives if they had not responded. The first reminder was a letter requesting that if they were willing, the researcher would appreciate their participation in the study. The second reminder included a copy of the questionnaire, consent form and stamped addressed envelope. It was assumed that those who had returned consent forms had also returned questionnaires. If it was unclear if a person had responded, they were included in the reminder mail out, with an apology to cover if they had already returned the questionnaire. A disadvantage of using a 'postal questionnaire' design for this group was that it potentially affected response rates, in that the surveys could be lost (they were 'posted' to the midwives in the workplace), or an individual may have been on leave during the study period. There may also be different response rates for different groups, resulting in some groups being underrepresented (Brown & Lumley, 1997). The response rates will be discussed in the chapter which presents the results of the study.

The questionnaires were not numbered or coded prior to being sent to each individual, to maximise anonymity. Upon return they were numbered, to enable them to be identified and tracked when entered on the database and during subsequent analysis. Five respondents removed the cover page of the questionnaire prior to filling in and returning it, which may have indicated that they still felt some uneasiness regarding how anonymous their answers would be.

3.6 Data analysis

In embedded case study design, *sub-units* are analysed separately as individual “cases”, then units, then “pattern matching” is used to view the case study as a whole (Yin, 1994, p119-120). DePoy and Gitlin (1994) suggest that “descriptive statistics, visual presentation of changes in quantitative measures, and inductive analyses of narrative information are useful analytic tools” (p157). According to Neiswiadomy (1993), content analysis is used to evaluate data from case studies as the researcher searches for patterns and themes.

3.6.1 Sub-unit one (the women) and sub-unit two (caseload midwives)

The information obtained in the background questionnaires was utilised in the discussion of the transcribed and coded interviews.

The interviews were transcribed verbatim, then analysed using a content analysis approach. Each interview was read through to gain an overall perspective, then read again to begin to identify themes within each question and each area of questioning. Common themes were described. To enhance reliability, an independent reviewer was asked to read the transcribed interviews and identify themes, which were then compared with the researchers themes and differences identified and discussed (Polit & Hungler, 1989). In analysing similar interviews, McCourt (1996) took note of “whether a view was very strongly expressed and the importance given to it by the women, rather than just looking at the number of comments on each issue” (McCourt, 1996, p9).

Following the transcription and analysis, the midwives from *sub-unit two* were asked if they would read through their transcribed interviews to establish that the responses they gave were what they intended (Yin, 1994). They were also asked to review the draft case report and comment on it. According to Yin (1994), this is an important validating procedure in case studies, and often leads to further evidence that was forgotten at the time of the original data collection. He suggests that these later comments can be noted and included in the report where relevant, and increase the accuracy and validity of the case study. As noted previously, the women in *sub-unit one* were not asked to participate in this process, as it was not included in the original consent and explanation, and time constraints and project scope were an issue.

3.6.2 Sub-unit three (midwives not directly involved in caseload)

Data were entered onto an Access database (Microsoft Corporation, 1997), then analysed using means and frequencies. Open-ended short answer questions were analysed by identification of key points and themes, with an independent reviewer reading the comments to identify themes, which were then compared with the researcher's themes and differences identified and discussed (Polit & Hungler, 1989). Statistical Package for the Social Sciences (SPSS Incorporated, 1999) was used for analyses of quantitative data.

3.7 Limitations of the research process

A limitation of case studies is their lack of generalisability (Nieswiadomy, 1987), however this study was not designed to generalise, but to explore the *caseload midwifery* model in a real life context.

Another limitation is that the researcher was working in the maternity unit where the case study took place prior to and during the first part of data collection. While no dependent relationships existed, it still may have been an influence on the midwives or the women's responses.

Ideally participants from each *sub-unit* would review the draft case study report and comment on it. Due to size and time constraints, this was not within the scope of the present study, and neither the women in *sub-unit one* or the midwives in *sub-unit three* participated in this process.

CHAPTER FOUR: research findings and discussion

4.1 Introduction

The findings of the study will be presented in this chapter. The organisation of the chapter will correspond to the three sub-units of the study: *sub-unit one* which focused on the women, *sub-unit two* which focused on the midwives who provide *caseload midwifery* care and *sub-unit three* which focused on the midwives who did not provide caseload care. The findings of each section will be followed by a discussion of the results. A further discussion, which draws the case study together as a whole, will be presented in the following and final chapter.

As discussed in section 1.2, it is important to note that at the time of data collection for the current study, the maternity unit in which the data was collected had been through a period of major change. Two completely separate maternity units had amalgamated 18 months previously, with many of the midwives expressing their unhappiness about the amalgamation in the first instance, and at the time of this study many issues regarding the amalgamation and the new unit structure remained unresolved. The midwifery manager of the unit had also changed three months earlier.

4.2 Sub-unit one (the women)

The findings presented in this section come from semi-structured interviews conducted with three women who had *caseload midwifery* care during their pregnancy. Each interview was transcribed verbatim then analysed. The fourth taped interview was lost to the study as the tape was damaged during the transcription process. As this mishap did not take place until several months after the interviews, and to avoid sample bias, it was decided not to recruit a further woman to the study to replace this interview. Each question area was examined for themes, then clustered into metaphors (a summary of the data relating to the metaphors is presented in Appendix X). A colleague also undertook this process, and any discrepancies were discussed and clarified, in order to validate the themes and metaphors. Metaphors are presented and discussed for each question area. Demographic information was collected for each woman and will be presented first. (Interview schedule and demographic data collection tool included as Appendix VII).

4.2.1 Demographic Details

This section presents the demographic data relating to the three women interviewed.

4.2.1.1 Results

The ages of the three women (who will be referred to as W1, W2 and W3) were 32, 33 and 26 respectively. W2 and W3 were primiparae, and W1 a multipara having her second baby. With her first baby W1 had chosen shared care with her General Practitioner for her care during pregnancy. Two of the women were married and one lived with her partner (W3). All the women were born in Australia, and had English

as their first language. Educationally, all three had completed year 12, with two subsequently completing a Diploma (W1 & 2) and one an apprenticeship (W3). All women booked for public maternity care.

4.2.2 The Women's Interviews

The results and discussion of results of the interviews with the three women are presented in this section.

4.2.2.1 Results

The interviews covered a range of areas relating to the women's views and experiences of receiving *caseload midwifery* care. Table 1(next page) provides a summary of the metaphors as they relate to each question area.

When the women were asked why they had chosen *caseload midwifery* for their care this pregnancy, the answers revealed that caseload had been ***recommended*** by either friends or the hospital, that the model appeared more suited to their needs, for example a bigger range of appointment times. One respondent had been ***unhappy*** with the model of care she initially chose. In terms of if the care was as they expected it to be, this differed between the women. One woman felt it was ***as*** she ***expected***, one had ***no expectations***, and one said "*it wasn't anything like I expected...[the visits] were longer... [and] it was more like she [the midwife] knew who you were*" (W2).

Table 1: Summary of metaphors emerging from interviews with women in sub-unit one (n=3)

Topic area/ question	Metaphors
Why did you choose <i>caseload midwifery</i> care?	<ul style="list-style-type: none"> • recommended • convenient • unhappy with other care
PREGNANCY	
Important aspects of care during pregnancy	<ul style="list-style-type: none"> • continuity • accessibility • waiting times
Was the care like you expected it to be?	<ul style="list-style-type: none"> • no expectations • better than expected • as expected
Did caseload meet your needs during pregnancy?	<ul style="list-style-type: none"> • met needs
Comment on the information received during pregnancy	<ul style="list-style-type: none"> • well informed • felt free to ask
LABOUR and BIRTH	
Important aspects of care during labour and birth	<ul style="list-style-type: none"> • reassurance • having a known midwife
If your midwife was not there, or if she had not been there, how would you feel?	<ul style="list-style-type: none"> • probably OK • more relaxed and comfortable with her there • midwives can't always be there
POSTNATAL	
Important aspects of care during postnatal stay	<ul style="list-style-type: none"> • help available if/ when needed
Views about caseload care during postnatal stay?	<ul style="list-style-type: none"> • good follow up seeing known midwife • had no effect
DOMICILIARY CARE and BEYOND	
Importance of known midwife for home visit?	<ul style="list-style-type: none"> • more comfortable • more likely to pick up problems
Effect of caseload care on preparedness for motherhood	<ul style="list-style-type: none"> • caseload care did not cover parenting issues

Three metaphors emerged describing what the women saw as important aspects of care during the pregnancy. These were *continuity*, *accessibility* and *waiting times*.

The following quotes illustrate these: “*having the continuity of having one person to go and see and contact if I had any problems or questions was definitely one of the*

most important things” (W1), and “*you don’t have to wait an hour or whatever*” (W2).

The three women felt *caseload midwifery* care had ***met their needs*** during pregnancy, had felt ***well informed*** and “*if there were any questions always felt I could ask them*” (W1).

Having a known midwife and being ***reassured*** were the metaphors that emerged as important aspects of care during the labour and birth. The women felt they needed “*reassurance that everything was going well*” (W1), with a strong feeling coming through that it was good to have a known midwife there as “*it made me feel comfortable*” (W3). Likewise, when asked how they would feel if one of their known midwives had not been present, there was an acknowledgment that “*they can’t be there all the time, it’s way too much on the [midwives]*” (W1), yet all women expressed a sense of increased comfort having a known carer. For example, “*made me more relaxed... because I trusted her so much*” (W2).

When discussing their postnatal care the main metaphor to present regarding important aspects of care was that ***help be available if and when needed***. This was clearly the most important aspect of the women’s postnatal care. When asked about the input of the caseload midwives into their care, it appeared that the women were comfortable with the visits received from the midwives, and perceived this as being satisfactory.

These views were in contrast with how the women felt regarding home visits by the midwives. All felt it was important to have a known midwife who helped them “*feel*

much more comfortable” (W3), and who could “*know what sort of person you are to pick up any small signs there's a problem*” (W1).

When asked how caseload care helped prepare them for motherhood or parenting, it was interesting to note that all women felt this was not talked about as part of their care. W1 felt this was reasonable, as it was her second time, W2 felt that it wasn't really the caseload midwives' area, and W3 expressed the view that the caseload midwife should have talked about this area “*maybe a little bit*”.

All three women would choose *caseload midwifery* care for their next pregnancy.

4.2.2.2 Discussion

In terms of why they chose *caseload midwifery* care, and what was important to them during their antenatal care, the women in this study identified many factors which are reported in the literature as increasing satisfaction with antenatal care. These factors included convenience and accessibility of the care (Homer, Davis & Brodie, 2000a; Zadoroznyj, 1996), decreased waiting times (Homer *et al*, 2000a; Laslett *et al*, 1997; Zadoroznyj, 1996), having continuity (Laslett *et al*, 1997; Zadoroznyj, 1996) and feeling happy with the information they received (Waldenström *et al*, 1999).

There was evidence throughout each interview that having a known carer was important to the women, which supports the literature on this topic (Brown & Lumley, 1998b). The women in this study perceived this to be less important during their postnatal stay. However, it may be that they perceived it as less important because that is the care they did receive, that is, the phenomenon of “what was must

be best” (Lumley, 1985). Regarding labour and birth, all of the women expressed views that although it was preferable to have a known carer for reasons such as being more relaxed and more comfortable, they understood that it may not always be possible.

4.3 Sub-unit two (caseload midwives)

The findings presented in this section come from semi-structured interviews conducted with four midwives regarding their work providing *caseload midwifery* care to women. The qualitative data from each question area was examined for themes, then clustered into metaphors (a summary of the data relating to the metaphors is presented in Appendix XI). A colleague also undertook this process, and any discrepancies were discussed and clarified, in order to validate the themes and metaphors. Metaphors are presented and discussed for each question area. Demographic information was collected for each midwife and will be presented first. (The interview schedule and demographic data collection tool are included as Appendix VIII). The midwives are referred to as MW1, MW2, MW3 and MW4

4.3.1 Demographic Details

The demographic information pertaining to the four caseload midwives who were interviewed is presented in this section.

4.3.1.1 Results

Of the four midwives interviewed, MW1 and MW3 were between 20 and 30 years of age, MW2 between 30 and 40 and MW4 over 40. MW1 and MW3 had been

midwives for less than five years, MW2 between six and ten years, and MW4 for over ten years. Only MW4 worked full time. MW2 and MW4 had undertaken midwifery education in a hospital program and MW1 and MW3 in a university program. MW1 had a Diploma, MW3 and MW4 had a Degree and MW1 and MW3 had a Graduate Diploma. Discussion of these details will be included in the discussion of the demographic background of the midwives in *sub-unit three* (section 4.3.2.2)

4.3.2 The Caseload Midwife Interviews

The results of the interviews with the four midwives are presented here, along with a discussion of these results.

4.3.2.1 Results

The interviews covered a range of areas relating to the midwives' views and experiences of being a caseload midwife (see Appendix VIII). Table 2 (next page) provides a summary of the metaphors as they relate to each question area.

Four metaphors evolved on the contemporary role of the midwife: *care throughout pregnancy and birth, there for the woman, professional communication and interaction and safe care*. The midwives saw the contemporary midwife as a someone who cares for women not just in isolated parts of the pregnancy, but who “provide[s] care right through the childbearing phase” (MW3), and is “involved in all aspects of childbirth” (MW1). Being there for the woman was highlighted in the midwives' descriptions on the role of the midwife: “to be an advocate...[and] a

support person... I think the midwife's most important role is to act for the woman"

(MW1), and *"to listen to what they [the women] want and tell them their rights... and just help them through with whatever they need"* (MW4).

Table 2: Summary of metaphors emerging from midwife interviews (n=4)

Topic area/ question	Metaphors
Contemporary role of midwife	<ul style="list-style-type: none"> • care throughout pregnancy and birth • there for the woman • professional communication and interaction • safe care
Overall opinion of caseload model	<ul style="list-style-type: none"> • good for women • good for midwives • effective management necessary
Current feelings about being a caseload midwife	<ul style="list-style-type: none"> • positive • worried about sustainability
Concerns, worries or fears when starting caseload	<ul style="list-style-type: none"> • range of skills required • 'on call'
Positive aspects of role as a caseload midwife	<ul style="list-style-type: none"> • continuity of care • knowing the woman • woman-centred care
Negative aspects of role as a caseload midwife	<ul style="list-style-type: none"> • lack of support • 'on call' • attitudes of others
Effect of being a caseload midwife on job satisfaction	<ul style="list-style-type: none"> • increased job satisfaction
Personal gains	<ul style="list-style-type: none"> • increased skills • increased job satisfaction • education opportunity • understand power of the women
Personal costs	<ul style="list-style-type: none"> • feeling 'labelled' • negative impact on social life • affects health negatively • inadequate reimbursement
Level of utilisation of skills before caseload	<ul style="list-style-type: none"> • all skills used but to different levels
Level of utilisation of skills since caseload	<ul style="list-style-type: none"> • broader use of skills
Support received from colleagues	<ul style="list-style-type: none"> • depends on individual • not enough support • increased recognition • need a supportive home life
Perceived effects of model for women	<ul style="list-style-type: none"> • supported • happy • empowered • unsure of effect on obstetric outcomes
Should caseload include women at 'high risk' of complications	<ul style="list-style-type: none"> • more demanding for midwife • midwife care should be a choice

	<ul style="list-style-type: none"> • may have more need for midwife care
Current functioning of model	<ul style="list-style-type: none"> • works quite well • system evolving to meet midwives' needs • teamwork important
Impact of being a caseload midwife on future career	<ul style="list-style-type: none"> • hard to go back • help future practice

Three metaphors emerged regarding the midwife's overall view of the *caseload midwifery* model: **good for women**, **good for midwives** and **effective management necessary**. *"I think it's fantastic for women... and I think from a staff point of view it's really fulfilling and it's very much more personal which is what midwifery should be like...[and] really giving good overall care. But it takes it's toll on midwives and needs to be very well managed"* [to be sustainable] (MW2).

When asked 'How are you currently feeling about being a caseload midwife?', two metaphors emerged: midwives were feeling **positive**, but **worried about sustainability**. This is illustrated in a comment by MW1: *"I feel very positive about being a midwife caring for the women... but I don't feel positive about where the model's heading in general"*. This sustainability appeared to be linked to the topic of support, discussed later in this section.

The metaphors which emerged in relation to the midwives' concerns, worries or fears when they commenced providing caseload care were the **range of skills required** and **'on call'** issues: *"just mainly the on call"* (MW4), and *"going out in the domiciliary area"* (MW2). *"I hadn't had much experience working in the antenatal clinic so I was pretty unsure of my skills... I found that was a bit scary having an assertive client as well as not being sure of my skills because I think she would have jumped on top of me had something slipped up"* (MW1).

The midwives were asked to comment on the positive and negative aspects of their role as caseload midwives. Metaphors formulated for the positive aspects were *continuity of care, knowing the woman* and *woman-centred care*. For example: “Really getting to know the women and knowing them well” (MW4). “Little things like a woman and her partner come for a visit and they greet you, not as a friend, it’s not like that, but you get to build up a relationship with them” (MW3); and “You see the impact of your antenatal care maybe during labour, or the impact of that labour on the persons recovery and going on to mothering” (MW2).

The metaphors representing the negative aspects, that is *lack of support, ‘on call’* and *attitudes of others* are illustrated well in the following statement by MW1:

Negative aspects would be nothing to do with the woman basically. The difficult part of the job is dealing with other people’s perceptions of what you should be doing... as opposed to what the woman actually wants you to do for her or with her. Trying to deal with management at the hospital level is by far the most negative aspect of my job. And the constant education of other staff... Being ‘on call’ too is a negative aspect but I think the other things are worse.

Overall, the midwives expressed an increase in job satisfaction as a result of their new role, and said they had gained a number of things personally from the role. The metaphors which emerged were *increased skills, increased job satisfaction*, that it had been an *education opportunity* and had helped to *understand the power of the woman*.

Metaphors related to personal costs of the role were: *feeling ‘labelled’, negative impact on social life, affects health negatively and inadequate reimbursement*. “I

think my health has suffered... I think my level of tiredness has definitely increased dramatically... but I don't know that it's necessarily from being 'on call' or whether it's just the stress of working in a new model of care" (MW1). "Probably [lack of] remuneration... for the hours we work" (MW2); and "I find it hard going home every night wondering whether the phone's going to ring" (MW4).

Utilisation of midwifery skills was explored, with *all skills being used but to different levels* being the metaphor describing the midwives' skill utilisation prior to commencing caseload. Since working as caseload midwives, the metaphor describing skill utilisation was *broader use of skills*.

The midwives were asked to comment on the support received from colleagues. Four metaphors emerged: *depends on individual, not enough support* and *increased recognition. Need a supportive home life* also emerged. Statements which illustrate these metaphors are: "*At present, not much. A lot of other midwives are fairly supportive but there's quite a few that aren't, and administration wise we feel ... not supported at all*" (MW4). "*There's still quite a bit of negativity from some of the doctors which is really quite disappointing but most of the midwives are pretty supportive*" (MW3). "*Some people have very closed minds and aren't particularly supportive, but then there are people who are very supportive*" (MW2). "*I think people know who I am where perhaps would have thought I was [just] another midwife before*" (MW1).

Four metaphors represent the midwives' perceptions of how caseload care affects women's outcomes and feelings. The midwives felt more able to comment on the

women's views and experiences of the care, that is: **supported, happy, empowered**, than they could on outcomes, that is the midwives were **unsure of effect on obstetric outcomes**. For example: "*Outcomes- I don't really know, because we seem to have our fair share of forceps, and I don't know if we've actually compared that, but I know their feelings. They feel really special and happy with the care even if they have a caesar (sic) or some unexpected outcome*" (MW4). "*I think it can have some pretty positive effects on women's outcomes really. For them just being supported and us being advocates and helping them talking about their decisions too really helps them become comfortable with the way they're going*" (MW3).

For the question 'How do you feel the model is functioning at present?', three metaphors were constructed: **works quite well, system is evolving to meet midwives' needs**, and **teamwork important**. A new system was about to commence whereby the midwives would have one month off (from being 'on call') out of every four months, and all midwives commented on this as a positive thing, which would help the functioning of the model. All midwives felt the model was working well, and that the four of them worked well as a team.

On the impact of being a caseload midwife on their future careers, two metaphors emerged: **hard to go back** and **will help future practice**. "I think if I ever had to just go back to working as a normal midwife it would be very hard" (MW4). "Working in caseload will stand me in good stead" (MW3).

4.3.2.2 Discussion

Overall the findings from the interviews with the caseload midwives in *sub-unit two* demonstrated several key factors: the midwives feel that the *caseload midwifery* model is good for the women, and that there are many positive outcomes for themselves as well. These include increased job satisfaction, broader use of skills and the ability to provide woman-centred care. Some key concerns expressed by the midwives relate to lack of support, the issue of being ‘on call’ and the negative attitudes of some colleagues.

Three key factors which help avoid burnout for midwives are having “occupational autonomy”, the availability of “social support” and the “opportunity to develop meaningful relationships with women” (Sandall, 1997, p108-110). The midwives in the current study mentioned all of these factors. In particular the relationship with the woman was mentioned a number of times as being extremely positive. Other factors reported in the literature as being positive for midwives working in new models are increased use of, and confidence in, skills as a midwife (Black, 1992; Docherty, 1995; Stock & Wraight, 1993), increased job satisfaction (Black, 1992; Brodie, 1996; Stock, 1994; Turnbull *et al*, 1995) and being able to provide continuity and ‘better’ care (Brodie, 1997; Hundley *et al*, 1995; Stock, 1994). All of these findings are supported in this study. Interestingly, in contrast, less than 20% of 240 midwives in a Victorian survey said there was increased job satisfaction in the previous five years and less than one third felt there was an increase in midwife autonomy (Watson *et al*, 1999). It may be that new midwifery models such as *caseload midwifery* will help address such issues.

Conversely, factors which add to midwife burnout, decrease midwife satisfaction, or which threaten the sustainability of new midwifery models are factors such as “poor continuity of care”, “lack of autonomy” (Watson *et al*, 1999, p224) and perceived lack of support from other staff, particularly management (Brodie, 1997; Ramsay, 1996). In the current study support was identified as an issue, and as such should possibly be addressed to enhance the sustainability of the model.

The issues surrounding rostering and ‘on call’ aspects remain controversial in the literature, that is they are identified as issues which do impact on midwives’ lives (Green *et al*, 2000; Stock, 1994). However, these issues may be balanced by developing relationships with women, supportive management structures and the opportunity for enhanced autonomy over work hours and work practices (Hundley *et al*, 1995; Stock & Wraight, 1993). In the current study there were mixed views, which reflected the literature. ‘On call’ was strongly identified as a negative by all midwives. However, all midwives felt happy with their current role as a caseload midwife, and wished to continue working in this way. The benefits still outweighed any negatives at the time the interviews took place. There was also a plan in place to change the current system so that each midwife had one month in four where they did not do any ‘on call’. All midwives felt this to be a positive move and acknowledged the importance of having a ‘fluid’, evolving model, as also discussed by McGinley *et al* (1995).

The four midwives who participated in the current study were given the opportunity to read the results presented in this section, then comment. MW3 and 4 responded. Neither was currently working in the model, although both non-respondents were

still working as caseload midwives. MW3 had moved interstate, where the model was unavailable, so she was working in a *standard care* model. She considered the draft report reflected accurately the *caseload midwifery* model. In retrospect, she considered that the caseload model was “much more fulfilling” and that currently her “skills, particularly in the antenatal and domiciliary area [were] sadly dropping away”. MW3 also had a sense of missing the relationships with women, and the challenges and supports that caseload provided.

MW4 likewise considered the draft report to be an accurate representation. She ceased working as a caseload midwife due to the stress of being ‘on call’, as well as a perception that management was increasingly unsupportive. She also worked full time and had to work regular shifts in addition to ‘on call’ hours, which she felt added to the ‘on call’ issue. MW4 concluded by saying “hopefully in time I will be able to [work in caseload] again”.

4.4 Sub-unit three (midwives not directly involved in caseload)

The findings presented in this section relate to the midwives in *sub-unit three*. These were the midwives who did not participate in providing caseload care. Data collection took place via a structured questionnaire (see Appendix IX).

4.4.1 Response Rate

4.4.1.1 Results

Questionnaires were sent to each midwife as described above in section 3.5.3 in early November 1999. Fourteen were returned within two weeks. A reminder was sent to the midwives at the end of November. Sixteen further questionnaires were returned by early December, at which time a second reminder (including a questionnaire) was sent to all known non-responders. Seven questionnaires were returned soon after this final reminder. Of the 68 questionnaires sent out, 37 were returned. This equated to a response rate of 54.4%.

4.4.1.2 Discussion

The response rate in the current study compares favourably with two recent Victorian studies. In a 1995 random sample of 1000 Victorian midwives (Watson *et al*, 1999), whilst the response rate was stated as 72%, only 54.2% of respondents completed questionnaires, with the remainder returning an acknowledgment letter only. Further, less than half of the respondents were practising midwives. Cutts' 1998 survey of midwives in Victoria, distributed via 144 maternity hospitals, had a very poor response rate of 23% (n=205) (Cutts, 1998). The response rate in the current study is therefore arguably higher in regards to practising midwives than comparable Victorian studies. It is possible that the recent amalgamation of the two maternity

units, mentioned earlier, may have affected the willingness of the midwives to participate in what may have seemed to them ‘more work’.

It may be difficult to assess the characteristics of non-responders (Brown & Lumley, 1997). Therefore, in this study it may possibly be difficult to generalise to the representativeness of the responders even within the unit studied, that is, how the views of the responders agree with those of the non-responders. However, an advantage of the case study method is that it draws together the information from various sources, thus enhancing reliability (Yin, 1994).

4.4.2 Demographics

This section presents the demographic details of the non-caseload midwives (*sub-unit three*), followed by a discussion of these results.

4.4.2.1 Results

A summary of the background characteristics of the midwives in *sub-unit three* are presented below in Table 3 (over page).

All respondents were over 30 years of age, with 86.5% being over 40 and the majority aged from 41-50 years. Over 90% had worked for more than ten years as a midwife, and 78% of respondents worked part time, although the exact number of hours worked was not asked. Not surprisingly in view of the years of experience as a midwife, 97% had undertaken their midwifery education in a hospital-based program. Although 57% of respondents had one or more tertiary qualifications, 16

respondents (43%) did not respond to this question, possibly indicating that they had not undertaken any tertiary study.

Table 3: Demographics of non-caseload midwives (n=37)

Variable	Frequency (f)	Percentage (%)
<i>Age (years)</i>		
< 20	0	0
20-30	0	0
31-40	5	13.5
41-50	23	62.2
> 50	9	24.3
<i>Years as a midwife</i>		
< 1	0	0
1-5	0	0
6-10	3	8.1
> 10	34	91.9
<i>Work hours</i>		
Full time	8	21.6
Part time	29	78.4
<i>Midwifery education</i>		
Hospital program	36	97.3
College/university	1	2.7
<i>Tertiary qualifications (could tick more than one option)</i>		
Diploma	10	27
Degree	12	32.4
Graduate diploma	5	13.5
Masters	1	2.7
PhD	0	0

4.4.2.2 Discussion

The present study found that 86% of non-caseload midwives were over 40 years of age. This was higher than both previously mentioned Victorian studies (Cutts, 1998; Watson *et al*, 1999). Watson *et al* (1999) found equal numbers of respondents under and over the age of forty and Cutts (1998) found 61% of respondents over 40 years of age. It is difficult to understand why the age range in the current study is so

skewed to over 40 years. One factor may be that the midwives under 40 years were more likely to have participated in providing some caseload care, and thus were ineligible for inclusion in the sample for *sub-unit three*. Another explanation may be that the particular maternity unit had a very low rate of staff attrition, and that positions were infrequently available for younger or newer midwives. A further possible explanation could be that older midwives felt more “comfortable” providing care within a traditional or *standard care* model. It could be argued that for these midwives, *caseload midwifery* may pose a threat. Interestingly, three of the four midwives in *sub-unit two* (the caseload midwives) were under 40 years of age.

In Watson *et al*’s (1999) and Cutts’ (1998) studies, responders were more likely to be part time. In the present study this was also the case, as seen in Table 3. This matched the midwifery workforce in the maternity unit at the time of data collection, that is, 13 (16%) full time midwives and 67 (84%) part time. Midwives in *sub-unit two* (caseload midwives), three of whom were part time, also fitted this pattern.

Ninety-seven percent of midwives in this study undertook midwifery education in a hospital-based program, and 3% in a tertiary program. This is not unexpected given the ages of the respondents and the years of midwifery experience, and considering that the first tertiary midwifery course began in Victoria in 1984 (Watson *et al*, 1999). Watson *et al* (1999) and Cutts (1998) had similar rates of tertiary educated midwives in their studies, that is 5 % and 7.8% respectively. Of the four midwives in *sub-unit two* (caseload midwives), equal numbers had undertaken hospital and tertiary based midwifery education.

4.4.3 Professional Issues

The next section of the questionnaire asked questions about professional issues. The results and discussion of these are presented below.

4.4.3.1 Results

Six questions related to the midwives feelings about various professional issues, and utilised a five point Likert-type scale, where 1 was ‘disagree strongly’ and 5 was ‘agree strongly’. Midwives were asked to circle the most appropriate answer for them. The results are presented in Table 4. The Kolmogorov-Smirnov test was used to test for normality (SPSS Incorporated, 1999). The results are presented as *means* (and standard deviations) where the distributions are normal and *medians* (with range) where they are not. (See Appendix XII for total responses to each point on the Likert-type scales, with percentages).

Table 4: Professional issues, non-caseload midwives (n=37)

Question	Mean* (Standard deviation)	Median* (Range)
The initial midwifery qualification adequately prepares midwives to be the primary caregiver for women throughout an uncomplicated pregnancy and labour	-	4.00 (1-5)
Midwives are able to fully utilise their skills	3.89 (0.94)	-
I feel confident to recognise deviations from normal during <i>pregnancy</i> and refer to the appropriate professional	-	5.00 (4-5)
I feel confident to recognise deviations from normal during <i>labour and birth</i> and refer appropriately	-	5.00 (2-5)
I feel valued as a midwife	4.00 (0.75)	-
I feel that midwives and obstetricians work effectively together	3.46 (0.99)	-

* Means presented where data normally distributed, medians used otherwise

Further exploration was undertaken comparing part time workers with full time workers, and those with tertiary qualifications versus those without, on all the scale items. These two demographics were chosen as they were the only areas that had adequate numbers in more than one group to undertake meaningful comparisons. *T-tests* were computed where *means* are presented, and the Mann-Whitney U test used where *medians* are presented (SPSS Incorporated, 1999). No statistically significant differences between full time and part time workers were found in any of the data. Only statistically significant findings are presented in the text.

When asked to rate if the initial midwifery qualification adequately prepares midwives to be the primary caregiver for women throughout an uncomplicated pregnancy and labour, eight midwives (21.6%) ‘agreed strongly’, with a *median* score of 4.00.

Eleven midwives (21.6%) ‘agreed strongly’ that they were able to fully utilise their skills, with a *mean* score of 3.89 (standard deviation [*SD*] 0.94). There was a statistically significant difference in the *mean* scores of the midwives who had a tertiary qualification (*mean* 3.62; *SD* 0.97) and those who did not (*mean* 4.24; *SD* 0.77; $t=2.23$; $p=0.04$), with midwives who had a tertiary qualification less likely to agree that their skills were fully utilised.

The question on professional issues which elicited the strongest response asked if midwives felt confident to recognise deviations from normal during pregnancy and

refer to the appropriate professional. All midwives responded with a '4' or '5' on this question, with a *median* of 5.00.

The question which asked if midwives felt confident to recognise deviations from normal during labour and birth and refer appropriately also showed a strong response, apart from one respondent whose response was '2'. Thirty-three midwives (89%) felt confident with this skill, with a *median* score of 5.00.

On the topic of feeling valued as a midwife only nine respondents (24.9%) 'agreed strongly', with the *mean* score being 4.00 (*SD* 0.75). Midwives who had a tertiary qualification were significantly less likely to agree that they felt valued as a midwife (*mean* 3.76; *SD* 0.77) than those who did not (*mean* 4.31; *SD* 0.60; $t=-2.36$; $p=0.02$).

The topic which elicited the least number of 'agree strongly' responses was regarding midwives and obstetricians working effectively together, where only four respondents (11.1%) 'agreed strongly'. The *mean* score for this question was 3.46 (*SD* 0.99). Midwives with a tertiary qualification were less likely to agree that midwives and obstetricians worked effectively together (*mean* 3.14; *SD* 1.06) than those who had no tertiary qualification (*mean* 3.88; *SD* 0.72; $t=-2.37$; $p=0.02$).

A further question asked was 'What professional development activities have you participated in over the last 12 months?' The results are summarised in Table 5 (over page). All midwives ticked at least one response, and could tick all that were applicable. Midwives were most likely to undertake inservice education, that is,

education sessions provided by the hospital, within regular work hours. The numbers attending each activity decreased as the ease of attendance decreased.

Table 5: Professional development activities (n=37)

Activity	<i>f</i>	%
Inservice education	34	91.9
Internal seminar	32	86.5
External seminar	28	75.7
External short course	8	21.6
University program	3	8.1
Other (specify)	0	0

4.4.3.2 Discussion

Although midwives considered their midwifery education prepared them adequately to function as a primary caregiver (*median* 4.00), many did not think that they were able to fully utilise their skills (*mean* 3.89). Further, although they felt valued as midwives (*median* 4.00), a significant number did not agree that midwives and obstetricians work well together (*mean* 3.46). These issues were not dissimilar to those that arose in other studies, with “medical dominance” and “autonomy” being two of the “important midwifery issues today” identified in Watson *et al* (1999, p221) and Cutts (1998), who found significant differences in levels of skill utilisation.

There were three areas where there was a difference between those with and without tertiary qualifications. These were being fully able to utilise skills, feeling valued as a midwife and agreeing that midwives and obstetricians and midwives work well together. In each of these, midwives with tertiary qualifications had lower scores. It may be that undertaking tertiary study makes one more likely to have higher

expectations of the role of the midwife and how the role fits in the interdisciplinary team.

Considering that inservice education was provided on a regular basis, and the unit had a clinical educator coordinating this process, it was not surprising that only one respondent (3%) had not attended an internal inservice education session. This is a higher rate of attendance than noted by Cutts (1998), which was 88%. Watson *et al* (1999) found only three quarters of respondents were involved in continuing professional development overall. Eight of the current sample (21%) had attended no external education at all. It is possible that those more likely to respond to a survey are those who are also more likely to participate in ongoing education.

4.4.4 Caseload Midwifery

The midwives were asked a series of questions related to the caseload model, concentrating on their understanding of the model from a generic perspective.

4.4.4.1 Results

In eight questions, Likert-type scales were used and analysed as described in section 4.3.3. The results of these are displayed in Table 6 (next page).

Over half the respondents (54%) strongly agreed (that is, scored '5' on the scale) that they had a good understanding of the concept of *caseload midwifery* (*median 5.00*). Likewise, over half (52%) strongly agreed that *caseload midwifery* model is a good option of care for women (*median 5.00*).

Table 6: Non-caseload midwives' understanding of *caseload midwifery* model (n=37)

Question	Mean* (Standard deviation)	Median* (Range)
I have a good understanding of the concept of <i>caseload midwifery</i>	-	5.00 (2-5)
The <i>caseload midwifery</i> model is a good option of care for women	-	5.00 (2-5)
Women choosing <i>caseload midwifery</i> want to have " <i>natural</i> " childbirth	3.7 (0.94)	-
<i>Caseload midwifery</i> care should be restricted to " <i>low risk</i> " women	3.35 (1.14)	-
All women should be offered the option of <i>midwifery led</i> care for their pregnancy and birth	-	5.00 (1-5)
The main idea behind <i>caseload midwifery</i> is to get to know the midwife	3.7 (1.13)	-
<i>Caseload midwifery</i> is the same as <i>team midwifery</i>	-	2.00 (1-5)
Studies demonstrate that choice, continuity and control are important aspects of pregnancy care	-	5.00 (3-5)

* Means presented where data normally distributed, medians used otherwise

There were three questions in this section that sought to ascertain the respondents understanding of *caseload midwifery*. There was a range of responses to the statement 'Women choosing *caseload midwifery* want to have "*natural*" childbirth', with a *mean* score of 3.7 (*SD* 0.94), perhaps reflecting an area which is not well discussed in the literature. Similarly there was a range of responses to the concept that the main idea behind *caseload midwifery* is getting to know the midwife, with more of a trend to agree than disagree (*mean* 3.7; *SD* 1.13). This range is possibly greater than would be expected, given the fact that getting to know the midwife is arguably one of the key rationales behind *caseload midwifery*. The third statement which examined the respondents understanding of caseload was that *caseload midwifery* is the same as *team midwifery*. There did appear to be a good

understanding that this was not the case, with only 4 respondents circling higher than '3' (*median* 2.00).

Other questions in this section sought to gain an understanding of the respondents' ideas and knowledge on choices and continuity in maternity care. Over half (54%) strongly agreed that all women should be offered the option of midwifery led care for their pregnancy and birth (*median* 5.00), and well over half (63.9%) strongly agreed that 'studies demonstrate that choice, continuity and control are important aspects of pregnancy care' (*median* 5.00). When asked to rate if *caseload midwifery* care should be restricted to 'low risk' women, there was a fairly even spread of responses, with a *mean* of 3.35 (*SD* 1.14).

4.4.4.2 Discussion

Although the midwives rated themselves as having a good understanding of the *caseload midwifery* model (*median* 5.00), the basic underlying philosophy of having a known caregiver rated a *mean* score of only 3.7, suggesting that in fact their understanding was not complete. Despite this, there was a good understanding that *team midwifery* was different to caseload. Responses to questions about midwife care as a choice for women indicated that the respondents did view this as important, which may demonstrate an awareness of the literature regarding choice and continuity for women.

4.4.5 Caseload Midwifery at Birralee

The following section explored midwives' views of the caseload model in operation in the maternity unit in which they practised. There were five Likert-type questions,

as described in section 4.3.3, followed by two open-ended questions related to positive and negative aspects of the caseload model. Each midwife was asked if they would be interested in working in the caseload model, then to comment on their answer. A final open-ended question gave midwives the opportunity for any further comments.

4.4.5.1 Results

Table 7 shows the results of the Likert-type questions on non-caseload midwives' views of the caseload model at Birralee.

Table 7: Non-caseload midwives' views of the caseload model at Birralee (n=37)

Question	Mean (Standard deviation)	Median (Range)
<i>Caseload midwifery is working well at Birralee</i>	-	4.00 (1-5)
<i>Caseload midwifery should continue as an option of care for women attending Birralee for their pregnancy</i>	-	4.00 (1-5)
<i>Caseload midwifery is cost effective</i>	2.38 (1.32)	-
<i>Caseload midwifery improves client satisfaction</i>	-	4.00 (2-5)
<i>Caseload midwifery is not necessary at Birralee with the new team structure in place</i>	-	2.00 (1-5)

* Means presented where data normally distributed, medians used otherwise

Only two respondents (5.4%) 'strongly agreed' that '*caseload midwifery is working well at Birralee*', with a *median* score of 4.00. Conversely, only one respondent strongly disagreed, with the majority of midwives choosing '3' and '4' respectively. When asked if '*caseload midwifery should continue as an option of care for women attending Birralee for their pregnancy*', the trend was towards the 'agree' end of the scale, with a *median* of 4.00.

The majority of respondents did not consider that '*caseload midwifery* is cost effective', with 27 respondents (73%) circling "3" or less (*mean* 2.38; *SD* 1.32). They did however consider that it 'improves client satisfaction', with 31 (84%) circling '4' or '5', with a *median* of 4.00.

The question which explored the midwives' views on '*caseload midwifery* being unnecessary at Birralea with the new team structure in place' had a wide range of responses, with 65% (24 respondents) circling '1' or '2' (*median* 2.00).

The following two questions were open-ended, asking for comment on the positive and negative things about *caseload midwifery*. Content analysis was used to identify common themes, and comments are used verbatim to illustrate these. The first statement midwives were asked to comment on was: 'The positive things about *caseload midwifery* are: '. The themes identified are listed in Table 8 (next page), and discussed further in this section.

Satisfaction was the most common theme identified in this question. Seventeen respondents felt that *caseload midwifery* 'positively affected/ increased satisfaction for the woman, the midwife or both'. Midwives' comments on the woman's satisfaction included "*increased client satisfaction*" and "*increased woman and family satisfaction*", although one such comment was qualified: "*increased satisfaction for some women (not all)*". Midwife satisfaction was also discussed: "*increased midwife satisfaction*", "*midwife satisfaction in caring for pregnant*

woman until delivery”, “increased job satisfaction for the midwife” and again a qualified comment, that is, “midwife satisfaction if good outcome”.

Table 8: Non-caseload midwives’ comments on positive aspects of caseload (n=37)

‘The <u>positive</u> things about caseload midwifery are:’	<i>f</i>
Increased satisfaction for the woman and/or the midwife	17
The relationship between the woman and the midwife	15
Labour and birth outcomes are improved in some way	6
Continuity or care/ carer	6
The model provides options/ choices for women	5
Less medical/ more holistic/ wellness model	4
Empowers women/ increased control	3
Positive professionally for midwives	3
Overall positive	3
Partnership/sharing/ plan care together	3
‘Patient’ advocate	1
Clients better informed	1
Confidence in the midwife	1
Woman-centred	1
Other	2
Total	71
Blank/no comment	3

The relationship between the woman and the midwife was the next most common theme, with fifteen midwives identifying this as a positive aspect. Within this theme there were different aspects. These included comments stating that the relationship existed or developed, for example “*developing a relationship with the midwife*”, “*women get to know midwives*” and “*relationship between patient and carer*”. Other comments linked the relationship to enhancing the woman’s knowledge as well as the midwives knowledge of the woman. For example, “*clients feel midwife is approachable to ask questions and have time/ care for them on a more personal*

basis”, “*does not have to repeat needs*” and “*development of trust and understanding of goals and needs between mother, midwife and family*”. In other comments further words used by the midwives to describe the relationship were “*midwife and client rapport*”, “*special trust or bond created with the family*” and “*security of knowing and trusting a midwife*”.

The childbirth outcomes related to caseload were considered positive by six midwives. These included “*less intervention*”, “*reduced duration of labour (often)*”, “*improved outcomes*” and the “*majority of cases have better labours, normal deliveries*”.

Continuity of care/ carer was also noted as positive by six midwives. Comments included “*continuity of care- know your midwife well*”, “*guaranteed continuity of carer*”, “*one to one care*” and “*continuity of care, that is, not handing the client on after an eight hour shift*”.

Five midwives mentioned ***options and choices for women***. Comments included: “*women have choice, control and continuity of care*”, “*choice to have midwife care for them*”, “*an option*” and “*women and their partners given an option of care where they can have continuity of advice and education during pregnancy and support of their decisions during labour and childbirth*”. Four midwives felt caseload midwifery was “*more holistic*” and “*less medical*”, utilising a “*wellness model*”.

Four further themes emerging from comments from three midwives were: ***empowers women/ increased control, positive professionally for midwives, overall positive and partnership/sharing/ plan care together.***

There were two responses to this question about positive aspects of *caseload midwifery* which appeared to have a negative or ‘qualified’ tone: “*the patient gets ‘specialled’ without the cost of employing a private midwife*” and “*if the client has a short, non-eventful labour during the day the model works well*”.

The second statement the midwives were asked to comment on was: ‘The negative things about *caseload midwifery* are:’. The themes which emerged from this question are listed in Table 9 (over page).

Core staff being required to take over the care of caseload women was the most common theme. This related to two areas: either taking over caring for the woman in labour if the labour went on a long time, or providing any other care for the women in the absence of the caseload midwives. Some examples of the many strong views expressed on this issue are: [the] “*caseload midwife chooses when she wants to come in, not when the client wants her to come in, so often the rostered staff have to look after her*”; “*when caseload midwives have had enough they go home, expecting ward staff to add another woman’s care to their workload*”; “*caseload staff don’t provide postnatal care*”; “*staff don’t always come when called at night*”; “*quite*

often caseload midwives go home after delivery and leave dirty work for the rest of the staff to do”.

Table 9: Non-caseload midwives’ comments on negative aspects of caseload (n=37)

‘The negative things about caseload midwifery are:’	f
Core staff needing to take over many aspects of care (compared with caseload midwives providing all care)	16
Irregular hours of caseload midwives/on call/perceived impact on personal life of caseload midwives	11
Effect on core/ ward staff roster and staffing	10
Women’s attitudes/ dependence	9
Midwife burnout	7
Cost of the model	6
Lack of support for, and opposition to, caseload model	4
One to one care at the expense of other women’s care	4
Not enough midwives/ too many women	3
Tension between various groups	3
Will not suit all midwives	2
Communication issues	1
I cannot think of any	1
Other	3
Total	80
Blank/ no comment	4

The next most common theme regarding negative aspects of *caseload midwifery* was the perceived ***impact of caseload on the personal life of caseload midwives***. This included comments about the irregular hours, and the ‘on call’ work involved. Being “*on call overnight and on weekends*” and having “*no regular hours and being frequently on call*” were examples. A similar concern was that “*midwives involved in caseload have difficulty balancing their professional and personal lives*”.

The caseload midwives in this system were occasionally rostered as ward midwives if their caseload hours were low. When necessary, they were then ‘taken off’ the shift

if one of 'their' women went into labour. This situation lead to the next negative theme, that is, the *effect of caseload on core staff roster and ward staffing levels*. This was expressed in a variety of ways: "*caseload midwives rosters are disrupted which affects fellow staff members*"; "*staffing often inadequate when caseload midwife takes herself off the roster*"; "*needs to be run as a separate unit as [caseload] midwives unable to fulfill their ward obligations if also attached to the ward*".

A number of the midwives commented on the attitudes of the women in the caseload model, and that "*women can sometimes become dependent on their caseload midwife*". They considered this impacted on them as midwives, as the caseload women "*don't trust the advice of other midwives*", and "*are more reserved with other midwives*". Further, several midwives suggested that "*caseload mothers are more demanding*", that "*midwives are at their beck and call*" and that caseload "*clients become easily upset if their midwife can't get to them quick enough*".

Midwife burnout was cited as a negative aspect of *caseload midwifery* by seven midwives.

The *cost* associated with the caseload model was mentioned by six midwives, who were of the view that "*financially it is not cost effective*" and that it is "*costly to call in a caseload midwife when there are already midwives on duty free to take care of the woman*". One midwife commented on the extra money a caseload midwife receives for being 'on call' and for travel (although caseload midwives receive the same allowance to visit a woman postnatally as any other midwife). The midwife

asked “*why should the caseload midwife be paid extra if they choose to [work in this way]*”.

Other negative aspects mentioned by a few respondents were a lack of support for the model, that caseload care for some women resulted in compromised care for others, that more women wanted the care than there were midwives, and that the model would not suit all midwives. Two midwives commented on communication issues and the tension they perceived between various groups.

Four respondents did not respond to the question and one could not think of any negative aspects of *caseload midwifery*.

When asked whether they would like to participate in providing *caseload midwifery* 25 midwives (67.9%) said ‘no’ compared with three (8%) who answered ‘yes’. Two (5%) did not answer and seven (19%) were ‘not sure’ (Table 10).

Table 10: Would participate in *caseload midwifery* (n=37)

Responses	<i>f</i>	%
No response	2	5.4
Yes	3	8.1
No	25	67.6
Not sure	7	18.9

The following question asked for an explanation of why the midwives would or would not be interested in providing *caseload midwifery* care. Of the 35 midwives who answered the initial question of ‘would they work in the caseload model’, 5 did not comment or explain their answer.

Of the three midwives who answered ‘yes’ they would like to participate in *caseload midwifery*, explanations were qualified, for example “*can be good back-up for my other work*”, “*interested in caseload but restricted by my family at the moment*”, “*Interested more in occasional caseload client*”, and “*only in a back-up role during labour, until skills and confidence increase*”.

All but three of the midwives who answered “no” regarding participating in *caseload midwifery* had explanatory comments. The main themes that emerged were around the *on call* issues and the perception of the *required work hours*. Seven midwives mentioned *on call* as an issue, with comments including: “*too difficult to be on call and manage other aspects of my life*”; “*do not want to be on call*”; “*too old to be on call*”. Similarly, family commitments were mentioned by seven midwives, such as “*disruptive to family life*”, “*want to be able to be free to focus on family when not at work*” and “*not family friendly*”. A related area was that of the *importance of regular hours*, and *caseload midwifery* was not perceived as offering this by four midwives. Comments included “*want regular hours*” and “*want to know when I work and how long I work*”. Only two midwives noted that their experience was inadequate to be *caseload midwives*. One midwife commented that “*I have always worked in conjunction with other midwives and doctors and feel more comfortable in this situation*”.

A final question invited further comment on *caseload midwifery* care at Birralee. Twenty-one midwives (56.7%) wrote a comment in this section. These comments were analysed using content analysis for the identification of themes, and these are

presented in Table 11. The comments were quite varied, but themes did emerge, as well as some negative and positive comments which did not fit with other comments.

A number of midwives considered that *caseload midwifery* was a **good model**, such as “*excellent care to pregnant women*” and “*a marvellous model of care*”. This also included comments suggesting that “*it is a model of care that should be supported and expanded*”, and that “*it is a good attempt and should continue, expand and improve*”.

Table 11: Other comments on *caseload midwifery* (n=37)

‘Do you have any other comments on caseload midwifery care at Birralee?’	<i>f</i>
Good form of care	5
Need more midwives to work in caseload	5
Many women missing out on caseload	3
Needs evaluation which all can access	3
Meets women’s needs	2
Early discharge	2
Staff interaction	2
Should be totally separate	2
Additional positive comments	2
Additional negative comments	5

Five respondents believed that it “*would be good if more midwives were doing caseload*” and that if “*more midwives were involved [it would] take the pressure off those already providing the care*”. Further, having more midwives would mean that “*more women could take up the option*”. This comment was related to the following theme where respondents were concerned that women were **missing out on caseload care**, and that it was “*disappointing for women wanting caseload but finding out that care is booked out at first appointment, often when the woman is only 10 weeks*”.

There was some concern expressed that caseload ***needs evaluation*** and that these “*outcomes should be available to all staff*”, as well as the “*costing... and hours per client spent with the midwife*”.

A number of points were raised by two respondents, such as: “*this model of care fills a need for women who attend Birralee*”, some concerns regarding ‘early discharge’ being available to caseload clients, that ‘interaction’ between caseload midwives and other staff was important and that caseload should be run “*as a separate service*”.

Two positive comments were made, such as “*am happy to help out whenever I’m needed*”, as well as several negative comments. These included “*women get private care in a public hospital*”, “*at times caseload patients receive extra care at the expense of other patients*” and “*if the client expects ‘natural’ childbirth, are they willing to accept ‘natural’ morbidity and mortality rates too?*”

4.4.5.2 Discussion

The results indicate that in general the respondents did think that caseload care increased satisfaction for women, and overall, should continue as an option at Birralee. However, the model was not considered cost effective by the majority (*mean 2.38; SD 1.32*).

The positive themes identified about caseload relate largely to the ***relationship between the women and the caseload midwives***, the opportunity to offer ***continuity*** and the ***increase in satisfaction*** that is a result of these. In contrast, the negative

themes centred on *how the model affects the other midwives*, such as *being required to provide back-up for caseload women, disruption to ward rosters* and the *attitudes of the women receiving caseload care*. The other negative issues included *the cost of the model* and the possibility of *midwife burnout*. These views support the literature on the topic. Hall (1996) and Stock (1994) both discuss the issues and tensions arising when core ward staff are expected to provide back-up care for the women in new models. Bowman (1997) found that women in new models were labelled as assertive and demanding. In the trial context, Turnbull *et al* (1995) found that many *standard care* midwives commented that the new model could have been implemented better, and a number considered the new model disrupted their practice.

In the current study only three midwives said they would like to participate in providing caseload care themselves. Of the 25 that said they would not be interested, the main reasons given were related to the 'on call' aspects of the model, and how that potentially affected family and home life. These views are pertinent to the current debate on continuity of care, where Green *et al* (1998 & 2000) argue that models attempting to provide continuity of carer by way of an 'on call' system may not be the way forward due to their effect on midwives private lives. While this may be a valid point, it may be that at any given time a number of midwives will want to work in a way that provides continuity, and will be willing to provide some 'on call' as part of the model.

4.5 Summary

The participants in all three sub-units of the study considered the *caseload midwifery* model to be a good option of care. The women (*sub-unit one*) were positive about having a known midwife throughout their pregnancy and birth, and considered their experience to be improved by this factor. The women felt well informed and were positive about many factors available in the caseload model, such as short waiting times, the availability of information and reassurance. All three women would choose the caseload model again.

The caseload midwives (*sub-unit two*) highlighted the positive aspects of developing a relationship with the women, and being able to provide continuity throughout the childbirth episode. The negatives for this group related to lack of support, the attitudes of others and the ‘on call’ component of their role.

The non-caseload midwives (*sub-unit three*), whilst considering that the caseload model increased satisfaction for the women and the midwives, had a number of concerns related to the model, particularly regarding its impact on core ward staffing, the perceived impact on the caseload midwives’ lives, and the costs of the model.

A further discussion of these findings, including similarities and variations, in will be presented in the following chapter.

CHAPTER FIVE: bringing the case study together

5.1 Introduction

This study explored the views and experiences of women and midwives approximately 18 months after a *caseload midwifery* model was implemented in a Melbourne metropolitan maternity facility. The study sought to explore and describe not only how the women found the new model of care, but also how the midwives providing the care, as well as those midwives not directly involved, found the new model. These three groups became the sub-units of analysis, that is, *sub-unit one*: four women receiving *caseload midwifery* care (although data from one woman was subsequently 'lost', as described in section 4.2, leaving three women in the study). *Sub-unit two*: four midwives involved in providing caseload care. *Sub-unit three*: midwives not directly involved in caseload care. Data collection involved semi-structured interviews (*sub-units one and two*), and a structured questionnaire for those in *sub-unit three*.

This final chapter brings the findings of the three sub-units of the case study together, looking at areas where there are matching patterns (Yin, 1994), as well as where there are divergent views. These findings are discussed in light of the sustainability of the model at the particular case study site. The limitations of the study are reported, and suggestions made for future areas of research.

5.2 The three sub-units: a joint discussion

A summary of the findings from each sub-unit is presented below, followed by a discussion of how these findings come together as a case study.

5.2.1 A Summary of the Findings

All the women in *sub-unit one* were positive about having the *continuity of a known midwife* throughout their pregnancy. They were also positive about the *accessibility of their midwife*, the *availability of information*, *decreased waiting times*, and increased *options for appointment times*. While the women appreciated having their known midwife (or her back-up midwife) care for them during labour and birth, they also appeared to have a clear understanding that this may not always be possible due to the midwife's professional and personal commitments. The women did not mind that their caseload midwife provided very little postnatal care during the hospital stay, but all women felt it to be very important that their known midwife undertook the domiciliary follow-up. None of the women felt that the caseload care they received had been of help in preparation for parenthood. This may indicate the need for further research into this aspect of pregnancy care. All three women would choose the *caseload midwifery* model for a subsequent pregnancy.

The midwives in *sub-unit two*, the caseload midwives, *enjoyed providing continuity* of care and *developing relationships with women* and their families. Overall, the midwives expressed positive views about working in this model of care, but considered that several factors required attention for *caseload midwifery* to be ongoing and sustainable. *Effective management* was thought to be important, as was *support from management and other midwives*, and *adequate reimbursement*. The

positive views expressed regarding caseload were related to the women and the relationships the midwives developed with them, whereas the negatives were related to more structural factors, such as the 'on call' hours and the perceived lack of support. The 'on call' issue was soon to be addressed with a new roster designed by the midwives themselves, where there was less 'on call' required of each midwife. All the midwives were looking forward to its inception.

Overall, the non-caseload midwives in *sub-unit three* considered *caseload midwifery* to be a good form of care for women, which should continue as an option. There were however, many concerns about issues such as the *cost* of the model and problems around how caseload adversely *affects the ward staffing*. *Midwife burnout* was also cited as an issue by the non-caseload midwives, as was the perception that women receiving caseload care may become dependent. Of the 37 midwives, the vast majority would not want to be involved in providing *caseload midwifery* care, with irregular hours, 'on call' and family commitments being the main reasons cited. Some negativity towards the model did seem to exist for some respondents, with comments such as "*women get private care in a public hospital*", "*at times caseload patients receive extra care at the expense of other patients*" illustrating this.

5.2.2 Matching Patterns and Themes

The common theme in all three sub-units regarding the *caseload midwifery* model was *continuity of care*, and the fact that the model allowed midwives and women to develop a relationship. All three groups, women and midwives, considered the continuity aspect to be a very positive and important part of the model.

The only other area mentioned by all three sample groups was the issue of the caseload midwives coming in '*on call*'. The two groups of midwives both believed 'on call' was an important factor that could potentially affect midwives' personal lives. Only the non-caseload midwives actually mentioned the words 'burnout', possibly indicating that they were more concerned about this issue than the midwives actually providing the 'on call'. It may be that factors perceived from outside a system are not perceived the same way from the inside. The caseload midwives themselves expressed some concern about being 'on call', and how it affected their lives, but did not translate these concerns into words such as 'burnout'. The women displayed an awareness that it may not always be possible for 'their' midwife to be present for their labour and birth and that the midwives also had other commitments. Although women preferred their midwives to be there, they expressed an understanding if this could not be.

The two groups of midwives, caseload and non-caseload, shared other common themes, both negative and positive. Both groups identified that there was *increased satisfaction* for the women receiving, and midwives providing, *caseload midwifery* care. Some non-caseload midwives were also in agreement with the caseload midwives about other factors, such as *lack of support for the model* and that caseload was *positive professionally* for the midwives involved.

5.2.3 Divergent Themes

It is possibly the divergent themes which reveal issues that have the most potential to impact on the sustainability of the caseload model. The themes which stood out as differing between the two groups of midwives were largely related to infrastructure,

and in general were the more negative issues. The caseload midwives had concerns about the *lack of support, lack of remuneration* and the *attitudes of their colleagues*. However, they were positive about the fact that the model was an evolving one where issues such as the 'on call' could be addressed. Conversely, the non-caseload midwives were concerned about the *effect of the model on core ward staffing and rosters*. Some considered the women who received caseload became dependent or demanding, and there were concerns at the *cost* of the model, and that some women received this care at the expense of other women.

5.2.4 Implications of the Findings for the Case Study Site

If a new model of care is to be implemented and maintained, all key stakeholders need to support the model. There are clearly issues that need to be addressed at the current case study site. Overall it would appear that *caseload midwifery* is viewed as a positive option for women at Birralee, however the findings of this study suggest that there are some important issues which need to be addressed if the model is to be ongoing and sustainable. In particular, the aspects which the caseload and non-caseload midwives perceive as negative about the model, such as the effect on core staffing, the issues around the 'on call' aspects of the model and the perceived lack of management support, could potentially threaten its ongoing viability. The other key issues requiring resolution are those of the costs of the model, the remuneration the caseload midwives receive, and professional issues relating to the Federal Nurses' Award. It is crucial that maternity units implementing new models of midwifery care work in conjunction with the ANF to address these important professional issues. For example, what constitutes 'normal' working hours, and how

can existing wage structures be appropriately modified to reflect the needs of models involving such regular and ongoing 'on call' requirements?

Looking at the case study in light of the conceptual framework of this study, that is, *the women, the midwives and the care*, the findings suggest that the two interrelated areas of *the midwives* and *the care* are not interacting and functionally optimally. The respondents in each sub-unit of the study believe it to be a good model of care for women, yet there are concerns from the midwives of both sub-units that the way the care is being implemented is less than optimal. The findings of the current study would be a good starting point which could be utilised to assess the caseload model of care as it is, and to systematically review the key concerns identified in this study.

5.3 Limitations of the study

A complete and comprehensive case study would include all possible sources of evidence (Yin, 1994). In this case that would include a cost analysis, as well as obtaining input from other groups such as management, the medical staff and other relevant information sources. It would also have been preferable to include a broader range and number of women utilising the service, including those receiving *standard care*. These inclusions were not possible given the scope of the current study.

Another limitation in terms of the generalisability of the findings of this case study to other similar units implementing a *caseload midwifery* model, is the fact that the case study site had recently emerged from the amalgamation of two separate maternity units. It is possible that this may have impacted on how staff viewed any subsequent

change, and may also have affected their responses to the questions put to them in this study.

A final limitation of the study is that a randomised controlled trial may have been a superior method of evaluating the implementation of a new model of maternity care. This would have increased the generalisability of the findings, and could have been included as part of the case study design. Again, this was not possible due to the scope of the study.

5.4 Conclusion and recommendations

Even with the knowledge of the process of change and expectation of resistance, considerable time, energy and effort is required to implement change...Midwives taking an active role in the process must be prepared for setbacks [and] ...commitment is required (Everitt, 1997).

In view of the known evidence of what women want in maternity care, that is choice, continuity and control, it is important that maternity service providers critically review the services they offer to women, and when necessary implement new models to better meet women's needs and to ensure that the care is woman-centred. It is equally important to evaluate the implementation of these models, from the perspective of the consumers and the midwives, those both directly and indirectly involved. When a maternity unit is implementing a new type of care, it is important that it is done in light of the current evidence and with all key stakeholders having adequate input. New models of care will have far less likelihood of success and ongoing sustainability if the implementation is not well managed. Lewis (1995) stated "change can best be brought about by cooperation rather than confrontation ...

but in my experience, the midwives are more often the most formidable barriers to change” (Lewis, 1995, p475).

In the current study the effect of implementing a new model of maternity care, *caseload midwifery*, has been explored. The new model is currently ongoing, but this case study suggests that there are issues that require review and resolution for the model’s continuing success. It is important that not only are women happy with their care, but also that the caseload and non-caseload midwives consider that the model to be functioning optimally. It is equally important that the management team is supportive of the model, and that they, in conjunction with the midwives, are willing to work on any problems or issues which arise. In any process of change it is important that there is adequate and ongoing consultation, education and communication (Everitt, 1997). It is possible that there was a lack of widespread consultation and ongoing communication with key stakeholders in the implementation of the *caseload midwifery* model at the case study site. However, the current exploration of the views and experiences of the women and midwives offers an opportunity to revisit how the caseload model is functioning, and to reassess areas requiring resolution.

Important areas for future research would be further exploration of the obstetric and medical outcomes of the *caseload midwifery* model, as well as research which further explores the implementation of new models of maternity care in terms of all key stakeholders. This is particularly lacking in the Australian context, yet it would be very timely, as many new models of maternity care are being implemented throughout the country. If these new midwife-managed models are to be sustained,

then effective evaluation of their implementation, and appropriate changes where necessary are crucial. Finally, as the key providers in these new models, it is essential that the views and experiences of the midwives providing the care are regularly and rigorously considered and evaluated, and that supportive structures are in place for them. Without the committed and enthusiastic input of midwives, new models of maternity care cannot exist and the women for whom pregnancy care is provided may be less than optimal.

6. REFERENCES

- ACT Health. 1994. *ACT Maternity Services Review*. Canberra. ACT Health Department.
- Armstrong, B., White, E. & Saracci, R. 1992. *Principles of Exposure Measurement in Epidemiology*. Oxford. Oxford University Press.
- Bakker, R.H., Groenewegen, P.P., Jabaaij, L., Meijer, W., Sixma, H. & de Veer, A. 1996. "Burnout" among Dutch midwives. *Midwifery*, 12: 174-181.
- Bennett, A. 1985. The birth of a first child: do women's reports' change over time? *Birth*, (12): 153-158.
- Berg, M., Lundgren, I., Hermansson, E. & Wahlberg, V. 1996. Women's experience of the encounter with the midwife during childbirth. *Midwifery*, (12): 11-15.
- Biro, M. 2000. The Collaborative Pregnancy Care/ Team Midwifery Study: a randomised controlled trial. *Perinatal Society of Australia and New Zealand 4th Annual Congress*. Brisbane.
- Black, F. 1992. Perceptions of team midwifery. *Nursing Standard*, 6(4): 34-36.
- Bowman, S., Hunter, H. & Wotley, C. 1997. From Job to Real Purpose. *Australian College of Midwives Incorporated National Conference*. Melbourne. 275-283.
- Bramadat, I. & Drieger, M. 1993. Satisfaction with Childbirth: Theories and Methods of Measurement. *Birth*, 20(1): 22-29.
- Brodie, P. 1996. Australian Team Midwives in Transition. *The Art and Science of Midwifery gives Birth to a Better Future. International Confederation of Midwives 24th Triennial Congress*. Oslo, Norway. 132-135.
- Brodie, P. 1997. The Experiences of Australian Team Midwives. Implications for Practice. *The Truth, Virtue and Beauty of Midwifery. Australian College of Midwives Inc. 10th Biennial Conference*. Melbourne, Australia. 47-55.
- Brown, S. & Lumley, J. 1994. Satisfaction With Care in Labour and Birth: A Survey of 790 Australian Women. *Birth*, 21(March): 4-13.
- Brown, S. & Lumley, J. 1997. The 1993 Survey of Recent Mothers: Issues in Survey Design, Analysis and Influencing Policy. *International Journal for Quality in Health Care*, 9(4): 265-275.

- Brown, S. & Lumley, J. 1998a. Are cuts to health expenditure in Victoria compromising quality of care? *Australian and New Zealand Journal of Public Health*, 22(2): 279-281.
- Brown, S. & Lumley, J. 1998b. Changing childbirth: lessons from an Australian survey of 1336 women. *British Journal of Obstetrics and Gynaecology*, 105: 143-155.
- Brown, S., Lumley, J., Small, R. & Astbury, J. 1994. *Missing Voices: the Experience of Motherhood*. Melbourne. Oxford University Press.
- Browne, A. 1994. Are midwives ready for change? *Nursing Times*, 90(47): 36-37.
- Carveth, J.A. 1987. Conceptual models in Nurse-Midwifery. *Journal of Nurse-Midwifery*, 32(1): 20-25.
- Collins, C. 1990. Job Satisfaction of CNMs. *Journal of Nurse-Midwifery*, 35(4): 237-244.
- Cutts, D. 1998. *The Nature and Practice of Midwifery Today- Within the State of Victoria*. Melbourne. RMIT.
- Department of Health and Community Services Victoria. 1993. *Post acute maternity services: a discussion paper*. Melbourne. Victorian Government.
- Department of Health NSW. 1989. *Maternity Services in NSW. Final Report of the Ministerial Taskforce on Obstetric Services in NSW*. Department of Health NSW.
- Department of Human Services. 1999a. *Maternity Services Program: Information*. Melbourne. Victorian State Government.
- Department of Human Services. 1999b. *WUDWAW: Who Usually Delivers Whom and Where- Report on Models of Antenatal Care*. Melbourne. Perinatal Data Collection Unit, Victorian Government Department of Human Services.
- DePoy, E. & Gitlin, L. 1994. *Introduction to research. Multiple strategies for Health and Human Services*. St Louis. CV Mosby Company.
- Docherty, B. 1995. A Personal View of a Midwifery Development Unit. *Midwives*, July: 230-231.
- Everitt, L. 1997. The Impact of Organisational Change Upon Midwives. *The Truth, Virtue and Beauty of Midwifery. Australian College of Midwives Inc 10th Biennial Conference*. Melbourne, Australia. 183-193
- Expert Maternity Group. 1993. *Changing Childbirth: the Report of the Expert Maternity Group (Cumberlege Report)*. London.

- Farquhar, M., Camilleri-Ferrante, C. & Todd, C. 2000. Continuity of care in maternity services: women's views of one team midwifery scheme. *Midwifery*, (16): 35-47.
- Fellowes, D., Horsley, A. & Rochefort, J. 1999. Is continuity of care a top priority for all women? *British Journal of Midwifery*, 7(1): 36-40.
- Fleissig, A. & Kroll, D. 1997. Achieving continuity of care and care. *Modern Midwife*, 7(8): 15-19.
- Fleming, V.E. 1998. Women-with -midwives-with-women: a model of interdependence. *Midwifery*, 14(3): 137-143.
- Flint, C. 1992. Name, set and match. *Health Service Journal*, July: 26.
- Flint, C. 1993. *Midwifery Teams and Caseloads*.UK. Butterworth, Heineman.
- Flint, C., Poulengeris, P. & Grant, A. 1989. The "Know Your Midwife" scheme- a randomised trial of continuity of care by a team of midwives. *Midwifery*, 5: 11-16.
- Forster, D. 1998a. Caseload Midwifery at Birralee in: J. Johnston (Ed) *Options for provision of midwifery services in Victoria*. Melbourne. Australian College of Midwives (Vic Branch).
- Forster, D.A. 1998b. Caseload Midwifery Care in the Birralee Maternity Unit, Melbourne. *New Models of Maternity Provision: Australian Midwifery Perspectives Conference*. Adelaide, South Australia.
- Graham, W. 1997. Midwife-led care: a commentary. *British Journal of Obstetrics and Gynaecology*, 104: 396-398.
- Green, J., Coupland, V. & Kitzinger, J. 1990. Expectations, Experiences, and Psychological Outcomes of Childbirth: A Prospective Study of 825 Women. *Birth*, 17(1): 15-24.
- Green, J.M., Curtis, P., Price, H. & Renfrew, M. 1998. *Continuing to Care*. Cheshire, UK. Books for Midwives Press.
- Green, J.M., Renfrew, M.J. & Curtis, P.A. 2000. Continuity of carer: what matters to women? A review of the evidence. *Midwifery*, 16: 186-196.
- Guilliland, K. & Pairman, S. 1994. The Midwifery Partnership- a Model For Practice. *NZ College of Midwives Journal*, October: 5-9.
- Guilliland, K. & Pairman, S. 1995. *The Midwifery Partnership. A model for Practice*. Wellington. Victoria University.

- Gumley, S., Haines, H. & Holland, J. 1997. Midwife Care Project. *Australian College of Midwives Incorporated National Conference*. Melbourne. 235-245.
- Hall, J. 1996. The trouble with teams: team midwifery and postnatal care. *MIDIRS Midwifery Digest*, 6(1): 77-78.
- Hart, A., Pankhurst, F. & Sommerville, F. 1999. An evaluation of team midwifery. *British Journal of Midwifery*, 7(9): 573-578.
- Harvey, S., Jarrell, J., Brant, R., Stainton, C. & Rach, D. 1996. A Randomized, Controlled Trial of Nurse-Midwifery Care. *Birth*, 23: 128-135.
- Health Department Victoria. 1990. *Having a Baby in Victoria. Final Report of the Ministerial Review of Birthing Services in Victoria*. Melbourne. Victorian State Government.
- Health Department WA. 1990. *Ministerial Taskforce to Review Obstetric, Neonatal and Gynaecological Services in Western Australia*. Perth. Western Australia State Government.
- Hodnett, E. 1997a. Continuity of caregivers during pregnancy and childbirth . In Neilson JP, Crowther CA, Hodnett ED, Hofmeyr GJ, Keirse MJNC (eds) *Pregnancy and Childbirth Module of the Cochrane Database of Systematic Reviews*.
- Hodnett, E. 1997b. Support from caregivers during childbirth. In: Neilson JP, Crowther CA, Hodnett ED, Hofmeyr GJ, Keirse MJNC (eds) *Pregnancy and Childbirth Module of The Cochrane Database of Systematic Reviews*.
- Homer, C., Davis, G. & Brodie, P. 2000a. Women's perceptions of community-based antenatal care. *Perinatal Society of Australia and New Zealand 4th Annual Congress*. Brisbane, Australia. 257.
- Homer, C., Davis, G., Brodie, P., Sheehan, A., Barclay, L., Wills, J. & Chapman, M. 2000b. Collaboration in maternity care: a randomised controlled trial comparing community based continuity of care with standard hospital care. *Perinatal Society of Australia and New Zealand 4th annual congress*. Brisbane, Australia. 51.
- Hundley, V., Cruickshank, F. & Lang, G. 1994. Midwife managed delivery unit: a randomised controlled comparison with consultant led care. *British Medical Journal*, (309): 1400-1404.
- Hundley, V., Milne, J., Glazener, C. & Mollison, J. 1997. Satisfaction and the three C's: continuity, choice and control. Women's views from a randomised controlled trial of midwife-led care. *British Journal of Obstetrics and Gynaecology*, 104(November): 1273-1280.

- Hundley, V.A., Cruickshank, F.M., Milne, J.M., Glazener, C.M., Lang, G.D., Turner, M., Blyth, D. & Mollison, J. 1995. Satisfaction and continuity of care: staff views in a midwife-managed delivery unit. *Midwifery*, 11: 163-173.
- Kenny, P., Brodie, P., Eckermann, S. & Hall, J. 1994. *Westmead Hospital Team Midwifery Project Evaluation. Final Report*. Westmead Hospital.
- Laslett, A-M.L., Brown, S. & Lumley, J. 1997. Women's Views of Different Models of Antenatal Care in Victoria, Australia. *Birth*, 24: 81-89.
- Leap, N. 1994. Caseload Practice within the NHS. Are midwives ready and interested? *Midwives Chronicle & Nursing Notes*, April: 130-135.
- Leap, N. 1996. Caseload practice: a recipe for burnout? *British Journal of Midwifery*, 4(6): 329-330.
- Lee, G. 1994. A Reassuring Familiar Face? *Nursing Times*, 90(17): 66-67.
- Lewis, P. 1995. Group practice midwifery- a time for reflection. *MIDIRS Midwifery Digest*, 5(4): 475-478.
- Lumley, J. 1985. Assessing Satisfaction With Childbirth. *Birth*, 12(3): 141-145.
- MacVicar, J., Dobbie, G., Owen-Johnstone, L., Jagger, C., Hopkins, M. & Kennedy, J. 1993. Simulated home delivery in hospital: a randomised controlled trial. *British Journal of Obstetrics and Gynaecology*, 100: 316-323.
- McCourt, C. 1996. One-to-One midwifery: Women's responses. *Modern Midwife*, October: 8-11.
- McCourt, C. 1998. Working patterns of caseload midwives: a diary analysis. *British Journal of Midwifery*, 6(9): 580-585.
- McCourt, C. & Page, L. 1996. *Report on the Evaluation of One-to-One Midwifery*. London. The Hammersmith Hospitals NHS Trust.
- McGinley, M., Turnbull, D., Fyvie, H., Johnstone, I. & MacLennan, B. 1995. Midwifery development unit at Glasgow Royal Maternity Hospital. *British Journal of Midwifery*, 3(7): 362-371.
- McIntyre, B. 2000. Caseload midwifery at The Angliss hospital. *Midwifery Models of Care and Continuity*. Mercy Hospital for Women. Melbourne.
- Microsoft Corporation 1997. *Access 97 SR-2* Microsoft.
- Morrison, J., Neale, L., Daji, Y., MacDonald, E., Bainbridge, J., Bustard, B., Thomas, S., Wrathall, K., Taylor, R. & McCowan, L. 2000. A randomised controlled trial of continuity of midwifery care for pregnant diabetic women. *Perinatal Society of Australia and New Zealand 4th Annual Congress*. Brisbane, Australia. 33.

- National Health and Medical Research Council (NH&MRC). 1996. *Options for Effective Care in Childbirth*. Canberra. Australian Government Printing Service.
- Nieswiadomy, R. 1987. *Fundamentals of nursing research*. Connecticut. Appleton and Lange.
- Nurses Board of Victoria. 1996. *Code of Practice for Midwives in Victoria*. Melbourne.
- Oakley, A., Hickey, D., Rajan, L. & Rigby, A. 1996. Social support in pregnancy: does it have long term effects? *Journal of Reproductive and Infant Psychology*, 14: 7-22.
- O'Donnell, R. 1998. Birth Centres and Beyond. *New Models of Maternity Provision: Australian Midwifery Perspectives Conference*. Adelaide, South Australia.
- Page, L. 1995. One-to-one midwifery practice: a vision evaluated. *Professional Care of Mother and Child*, 5(6): 146-147.
- Pairman, S. 1996. Midwifery: a partnership between the woman and the midwife. *International Confederation of Midwives 24th Triennial Congress*. Oslo. 297-300.
- Polit, D.F. & Hungler, B.P. 1989. *Essentials of Nursing Research: Methods, Appraisal, and Utilization*. Philadelphia. J.B. Lippincott Company.
- Ramsay, K. 1996. *Evaluation: Community Midwifery Service*. Brisbane. Mater Misericordiae Mother's Hospital.
- Rowley, M.J., Hensley, M.J., Brinsmead, M.W. & Wlodarczyk, J.H. 1995. Continuity of Care by a midwife team versus routine care during pregnancy and birth: a randomised trial. *The Medical Journal of Australia*, 163(18th September): 289-293.
- Rudestam, K. & Newton, R. 1992. *Surviving Your Dissertation. A Comprehensive Guide to Content and Process*. Newbury Park. Sage Publications.
- Sandall, J. 1996. Moving towards caseload practice: what evidence do we have? *British Journal of Midwifery*, 4(12): 620-621.
- Sandall, J. 1997. Midwives' burnout and continuity of care. *British Journal of Midwifery*, 5(2): 106-111.
- Secombe, I. & Stock, J. 1995. Team Midwifery in: L. Page (Ed) *Effective Group Practice in Midwifery. Working With Women*. Oxford. Blackwell Science.
- Seguin, L., Therrien, R., Champagne, F. & Larouche, D. 1989. The Components of Women's Satisfaction with Maternity Care. *Birth*, 16(3): 109-113.

- Slade, P., MacPherson, S., Hume, A. & Maresh, M. 1993. Expectations, experiences and satisfaction with labour. *Br J Clin Psychol*, 32: 469-483.
- SPSS Incorporated 1999. *SPSS for Windows version 9.0*. Chicago.
- Stamp, G. & Crowther, C. 1994. Women's views of their postnatal care by midwives at an Adelaide Women's Hospital. *Midwifery*, 10: 148-156.
- Stock, J. 1994. Continuity of Care in Maternity Services- The Implications for Midwives. *Health Manpower Management*, 20(3): 30-36.
- Stock, J. & Wraight, A. 1993. Providing Continuity: The Experience of Midwives. *Midwives Chronicle and Nursing Notes*, December: 476.
- Tucker, J., Hall, M., Howie, P., Reid, M., Barbour, R., du Florey, C. & McIlwaine, G. 1996. Should obstetricians see women in normal pregnancies? A multicentre randomised controlled trial of routine antenatal care by general practitioners and midwives compared with shared care led by obstetricians. *British Medical Journal*, 312: 554-559.
- Turnbull, D., Holmes, A., Schields, N., Cheyne, H., Twaddle, S., Gilmour, W.H., McGinley, M., Reid, M., Johnstone, I., Geer, I., McIlwaine, G. & Lunan, C.B. 1996. Randomised, controlled trial of efficacy of midwife-managed care. *Lancet*, 348: 213-218.
- Turnbull, D., Reid, M., McGinley, M. & Shields, N.R. 1995. Changes in midwives' attitudes to their professional role following the implementation of the midwifery development unit. *Midwifery*, 11: 110-119.
- Victorian Government 1985. *Midwives Regulations 1985, Statutory Rules No. 256*. Melbourne. State Government.
- Waldenström, U. 1998. Continuity of carer and satisfaction. *Midwifery*, 14: 207-213.
- Waldenström, U. 1999. Experience of Labour and Birth in 1111 women. *Journal of Psychosomatic Research*, 47(5): 471-482.
- Waldenström, U., Brennecke, S., Brown, S., McLachlan, H., Forster, D. & Lynch, L. 1999. *Team Midwife Care*. Melbourne. The Royal Women's Hospital.
- Waldenström, U., Brown, S., McLachlan, H., Forster, D. & Brennecke, S. 2000. Does continuity of midwifery care increase satisfaction with antenatal, intrapartum and postpartum care? *Birth*, 27 (3): 156-167.
- Waldenström, U. & Nilsson, C. 1994. Experience of childbirth in a birth centre. A randomised controlled study. *Acta Obstet Gyanaecol Scand*, 73: 547-553.
- Waldenström, U. & Nilsson, C. 1993. Women's Satisfaction with Birth Centre Care: A Randomized, Controlled Study. *Birth*, 20(1): 3-13.

- Waldenström, U., Nilsson, C. & Winbladh, B. 1997. The Stockholm Birth Centre Trial: maternal and infant outcome. *British Journal of Obstetrics and Gynaecology*, 104: 410-418.
- Waldenström, U. & Turnbull, D. 1998. A systematic review comparing continuity of midwifery care with standard maternity services. *British Journal of Obstetrics and Gynaecology*, 105: 1160-1170.
- Walker, J., Hall, S. & Thomas, M. 1995. The experience of labour: a perspective from those receiving care in a midwife-led unit. *Midwifery*, 11: 120-129.
- Walsh, D. 1995. Continuity of carer: miracle or mirage? *British Journal of Midwifery*, 3:336-338
- Watson, L., Potter, A. & Donohue, L. 1999. Midwives in Victoria, Australia: a survey of current issues and job satisfaction. *Midwifery*, 15: 216-231.
- Wise, J. 1996. Preparation for caseload management. *Modern Midwife*, 6(1): 15-17.
- Woods, N. & Mitchell, P. 1988. Designing Studies to Explore Association and Difference in: *Nursing Research, Theory and Practice*. St Louis. CV Mosby Company.
- Woodward, V. 2000. Caring for women: the potential contribution of formal theory to midwifery practice. *Midwifery*, (16): 68-75.
- Yelland, J., Small, R., Lumley, J., Liamputtong Rice, P., Cotronei, V. & Warren, R. 1998. Support, sensitivity, satisfaction: Filipino, Turkish and Vietnamese women's experiences of postnatal hospital stay. *Midwifery*, 14: 144-154.
- Yin, R.K. 1994. *Case Study Research: Design and Methods*. Thousand Oaks, California. Sage.
- Zadoroznyj, M. 1996. Women's satisfaction with antenatal and postnatal care: an analysis of individual and organisational factors. *Australian and New Zealand Journal of Public Health*, 20(6): 594-602.

Appendix I

Guilliland and Pairman's model- The Midwifery Partnership (A model for practice)

The Midwifery Partnership (A model for Practice)

Erratum Slip: Page 50

Gulliland & Palmer 1994

Appendix II

The Conceptual Framework

THE CONCEPTUAL FRAMEWORK

- *THE WOMAN*

- ⇒ choice

- ⇒ satisfaction

- ⇒ relationship with midwife

- *THE MIDWIFE*

- ⇒ professional and personal issues

- ⇒ relationship with the woman

- *THE CARE*

- ⇒ continuity models

- ⇒ outcomes

- ⇒ midwives' views

- ⇒ sustainability

Appendix III

Summary of randomised controlled trials included in the literature review

Author/ year	Country	Design	Sample size	Risk status	Part of pregnancy in model	Satisfaction of women in continuity model	Effect on midwives	Effect on other midwives
Flint et al 1989	England	RCT	1001	Low risk	AN, IP, PN	Increased	Published data not identified	Questionnaire to all staff. Results very positive (Flint, 1993)
Waldenström et al 1997	Sweden	RCT	1860	Low risk	AN, IP, PN	Increased	Assessed, but article in Swedish only	Not reported
MacVicar et al 1993	England	RCT (2:1 ratio)	3510	Low risk	AN, IP	Increased	Not reported	Not reported
Kenny et al 1994	Australia	RCT	446	Low & high risk	AN, IP, some PN	Increased	Increased job satisfaction & professional confidence. Reported by Brodie (1997)	Not reported
Hundley et al 1994	Scotland	RCT (2:1 ratio)	2844	Low risk	IP	No difference	Examined midwives satisfaction in detail	Standard care midwives in the labour ward less satisfied

Rowley et al 1995	Australia	RCT	814	Low & high risk	AN, IP, some IP	Increased	Multiple data sources and grounded theory approach. Reported in Brodie (1997)	Not reported
Turnbull et al 1996	Scotland	RCT	1299	Low risk	AN, IP, PN	Increased	Midwives experienced significant positive change in attitude, with no evidence of increased stress	41% felt implementation could have been improved, 10% felt clinical area disrupted, 70% felt this model the way of the future
Tucker et al 1996	Scotland	RCT	1765	Low risk	AN	Both groups had high satisfaction levels with care	Not reported	Not reported
Harvey et al 1996	Canada	RCT	218	Low risk	AN, IP, some PN	Not reported	Not reported	Not reported
Waldenström et al 2000	Australia	RCT	1000	Low risk	AN, IP, some PN	Increased	Data collected by interview. Awaiting analysis	Not assessed
Homer et al 2000	Australia	RCT	1089	Low & high	AN, IP, some PN	Reported easier access to care & higher	Not reported	Not reported

				risk		perceived 'quality' of antenatal care		
Biro 2000	Australia	RCT	1000	Low & high risk	AN, IP, PN	Increased	Not reported	Not reported
McCourt and Page 1996	England	Prosp. cohort, matched communities	1403	Low & high risk	AN, IP, some PN	Both groups most satisfied with antenatal & least satisfied with postnatal care	Midwives satisfied with the new model. Did not want to revert to former method	Not reported

AN: antenatal, IP: intrapartum, PN: postnatal

Appendix IV

Research and Ethics Approvals

Appendix V

**Consent documentation for
each sub-unit**

(Attachment
1B)

RMIT
SUBJECTS

RESEARCH PROJECT INVOLVING HUMAN

DEPARTMENT OF Nursing and Public Health

FACULTY OF Biomedical and Health Sciences and Nursing

**Prescribed Consent Form For Persons Participating In Research
Projects Involving Interviews, Questionnaires or Disclosure of
Personal Information**

Name of participant: _____

Project Title: Caseload midwifery: a case study examining the effect of
implementing this model of care in a metropolitan maternity facility

Name of investigator(s):	Della Forster	Tel: (BH)	9895 4652
		Tel: (Hme)	9480 3797
	Diane Cutts	Tel: (BH)	9925 7448

1. I consent to participate in the above project, the particulars of which - including details of interview and background questionnaire, and the use of my medical record to extract relevant data - have been explained to me and are appended hereto.
2. I authorise the investigator or his or her assistant to interview me, administer a questionnaire and access my medical record if necessary.

3. I acknowledge that:

- (a) I have been informed that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied;
- (b) The project is for the purpose of research and/or teaching and not for treatment.
- (c) I have read and retained a copy of the Plain Language Statement, and agree to the general purpose, methods and demands of the study.
- (d) The project may not be of direct benefit to me.
- (e) My involvement entails completing an interview, which will take approximately one hour and filling in a questionnaire which will take approximately five minutes.
- (f) My anonymity is assured.
- (g) Confidentiality is assured. However, should information of a confidential nature need to be disclosed for moral, clinical or legal reasons, I will be given an opportunity to negotiate the terms of this disclosure.
- (h) The security of the data obtained is assured following completion of the study.
- (i) The research data collected during the study may be published, and a report of the project outcomes will be provided to the RMIT Higher Degree Coursework Committee and to the Birralee Maternity Service.
Any data which may identify me will not be used.

Signature: _____ Date: _____
(Participant)

Signature: _____ Date: _____
(Witness to signature)

Where participant is under 18 years of age:

I consent to the participation of _____ in the above project.

Signature: _____ Date: _____
(Signature of parent or guardian)

Signature_____Date: _____
(Witness to signature)

Participants should be given a photocopy of this consent form after it has been signed.

Any queries or complaints about your participation in this project may be directed to the Secretary, RMIT Human Research Ethics Committee, RMIT, GPO Box 2476 V, Melbourne, 3001. The telephone number is (03) 9925 1745.

RMIT
SUBJECTS

RESEARCH PROJECT INVOLVING HUMAN

DEPARTMENT OF Nursing and Public Health

FACULTY OF Biomedical and Health Sciences and Nursing

**Prescribed Consent Form For Persons Participating In Research
Projects Involving Interviews. Questionnaires or Disclosure of
Personal Information**

Name of participant: _____

Project Title: Caseload midwifery: a case study examining the effect of
implementing this model of care in a metropolitan maternity facility

Name of investigator(s):	Della Forster	Tel: (BH)	9895 4652
		Tel: (Hme)	9480 3797
	Diane Cutts	Tel: (BH)	9925 7448

1. I consent to participate in the above project, the particulars of which - including details of questionnaires - have been explained to me and are appended hereto.
2. I authorise the investigator or his or her assistant to interview me or administer a questionnaire.

3. I acknowledge that:

- (a) I have been informed that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied;
- (b) The project is for the purpose of research and/or teaching and not for treatment.
- (c) I have read and retained a copy of the Plain Language Statement, and agree to the general purpose, methods and demands of the study.
- (d) The project may not be of direct benefit to me.
- (e) My involvement entails completing a questionnaire, which will take approximately 15 minutes.
- (f) My anonymity is assured.
- (g) Confidentiality is assured. However, should information of a confidential nature need to be disclosed for moral, clinical or legal reasons, I will be given an opportunity to negotiate the terms of this disclosure.
- (h) The security of the data obtained is assured following completion of the study.
- (i) The research data collected during the study may be published, and a report of the project outcomes will be provided to the RMIT Higher Degree Coursework Committee and to the Birralee Maternity Service.
Any data which may identify me will not be used.

Signature: _____ Date: _____
(Participant)

Signature: _____ Date: _____
(Witness to signature)

Where participant is under 18 years of age:

I consent to the participation of _____ in the above project.

Signature: _____ Date: _____
(Signature of parent or guardian)

Signature_____Date: _____
(Witness to signature)

Participants should be given a photocopy of this consent form after it has been signed.

Any queries or complaints about your participation in this project may be directed to the Secretary, RMIT Human Research Ethics Committee, RMIT, GPO Box 2476 V, Melbourne, 3001. The telephone number is (03) 9925 1745.

RMIT

SUBJECTS

RESEARCH PROJECT INVOLVING HUMAN

DEPARTMENT OF Nursing and Public Health

FACULTY OF Biomedical and Health Sciences and Nursing

Prescribed Consent Form For Persons Participating In Research Projects Involving Interviews, Questionnaires or Disclosure of Personal Information

Name of participant: _____

Project Title: Caseload midwifery: a case study examining the effect of
implementing this model of care in a metropolitan maternity facility

Name of investigator(s):	Della Forster	Tel: (BH)	9895 4652
		Tel: (Hme)	9480 3797
	Diane Cutts	Tel: (BH)	9925 7448

1. I consent to participate in the above project, the particulars of which - including details of interview and background questionnaire- have been explained to me and are appended hereto.
2. I authorise the investigator or his or her assistant to interview me and administer a questionnaire.

3. I acknowledge that:

- (a) I have been informed that I am free to withdraw from the project at any time and to withdraw any unprocessed data previously supplied;
- (b) The project is for the purpose of research and/or teaching and not for treatment.
- (c) I have read and retained a copy of the Plain Language Statement, and agree to the general purpose, methods and demands of the study.
- (d) The project may not be of direct benefit to me.
- (e) My involvement entails completing an interview, which will take approximately one hour and filling in a questionnaire which will take approximately five minutes.
- (f) My anonymity is assured.
- (g) Confidentiality is assured. However, should information of a confidential nature need to be disclosed for moral, clinical or legal reasons, I will be given an opportunity to negotiate the terms of this disclosure.
- (h) The security of the data obtained is assured following completion of the study.
- (i) The research data collected during the study may be published, and a report of the project outcomes will be provided to the RMIT Higher Degree Coursework Committee and to the Birralee Maternity Service.
Any data which may identify me will not be used.

Signature: _____ Date: _____
(Participant)

Signature: _____ Date: _____
(Witness to signature)

Where participant is under 18 years of age:

I consent to the participation of _____ in
the above project.

Signature: _____ Date: _____
(Signature of parent or guardian)

Signature _____ Date: _____
(Witness to signature)

Participants should be given a photocopy of this consent form after it has been signed.

Any queries or complaints about your participation in this project may be directed to the Secretary, RMIT Human Research Ethics Committee, RMIT, GPO Box 2476 V, Melbourne, 3001. The telephone number is (03) 9925 1745.

Appendix VI

**Plain language statements for
each sub-unit**

Title of Project: Caseload midwifery: a case study examining the effect of implementing this model of care in a metropolitan maternity facility

Investigator: Della Forster

Description of Project in Plain Language

Congratulations on the birth of your baby. You are invited to participate in a research study entitled "*Caseload midwifery: a case study examining the effect of implementing this model of care in a metropolitan maternity facility*".

The Birralee Maternity Service wants to provide you with the best possible care. For this reason we are evaluating the type of care you chose for your pregnancy, caseload midwifery. Caseload midwifery has been researched extensively on a large scale, but very few studies have examined women's experiences of this type of care in more depth. You are therefore invited to be involved in helping us gain a better understanding of what it is women want from their maternity care in general, and their experiences of caseload more specifically.

If you choose to be part of this study, you will be involved in an interview of about an hour, in approximately four to six weeks from now. This interview will take place in your home if this is convenient to you, but it could also be undertaken here at the hospital if you would prefer. The interview will be taped recorded and relevant information about your pregnancy and birth obtained from your medical record, with your permission. You will also be asked to fill in a short "background" information sheet and consent form today.

All the information which is discussed during the interview and which you give me will be treated as strictly confidential. Only my supervisor and myself will have access to it. The results of the study may appear in publications, however nothing written or published will identify anyone who takes part. You will be given a fictitious name to protect your identity, and referred to only by that. All information will be stored in a locked file, in a locked room. The computer files will be password protected.

This research is being undertaken as part of a Master of Midwifery program, in which I am currently enrolled at RMIT, in the Department of Nursing and Public Health. Associate Professor Diane Cutts is the supervisor of the project. Your

participation in this study is entirely voluntary, and you can withdraw from the study at any time if you wish to do so. You could do that by contacting myself, my supervisor, or the hospital.

If you have any questions or concerns regarding the study, please feel free to contact myself or Diane Cutts at any time on the numbers below.

Thank you for considering to participate in this study.

Della Forster
Midwife
Ph 9480 3797

Assoc Professor Diane Cutts
Midwife
Ph 9925 7448

<p>Any queries or complaints about your participation in this project may be directed to the Secretary, RMIT Human Research Ethics Committee, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 1745.</p>
--

Title of Project: Caseload midwifery: a case study examining the effect of implementing this model of care in a metropolitan maternity facility

Investigator: Della Forster

Description of Project in Plain Language

You are invited to participate in a research study entitled "*Caseload midwifery: a case study examining the effect of implementing this model of care in a metropolitan maternity facility*".

The Birralee Maternity Service wants to provide pregnant women with the best possible care, and to provide midwives with an optimal working environment. For these reasons we are evaluating the caseload midwifery model which has been operating at Birralee since March 1998 in a number of ways. Caseload midwifery has been researched extensively on a large scale, but very few studies have examined the midwives experiences of this type of model in more depth. As a midwife who has been providing caseload midwifery care you are invited to be involved in helping us gain a better understanding of how this model of care works for the midwives.

If you choose to be part of this study, you will be involved in an interview of about an hour, at a time and place that is mutually convenient. The interview will be taped recorded with your permission. You will be asked to fill in a consent form today, and complete a brief background questionnaire.

All the information which is discussed during the interview and which you give me will be treated as strictly confidential. Only my supervisor and myself will have access to it. The results of the study may appear in publications, however nothing written or published will identify anyone who takes part. You will be given a fictitious name to protect your identity, and referred to only by that. All information will be stored in a locked file, in a locked room. The computer files will be password protected.

This research is being undertaken as part of a Master of Midwifery program, in which I am currently enrolled at RMIT, in the Department of Nursing and Public Health. Associate Professor Diane Cutts is the supervisor of the project. Your participation in this study is entirely voluntary, and you can withdraw from the study at any time if you wish to do so. You could do that by contacting myself or my supervisor.

If you have any questions or concerns regarding the study, please feel free to contact myself or Diane Cutts at any time on the numbers below.

Thank you for considering to participate in this study.

Della Forster
Midwife
Ph 9480 3797

Assoc Professor Diane Cutts
Midwife
Ph 9925 7448

Any queries or complaints about your participation in this project may be directed to the Secretary, RMIT Human Research Ethics Committee, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 1745.

Title of Project: Caseload midwifery: a case study examining the effect of implementing this model of care in a metropolitan maternity facility

Investigator: Della Forster

Description of Project in Plain Language:

You are invited to participate in a research study entitled "*Caseload midwifery: a case study examining the effect of implementing this model of care in a metropolitan maternity facility*".

The Birralee Maternity Service wants to provide pregnant women with the best possible care, and provide midwives with an optimal working environment. For these reasons we are evaluating the caseload midwifery model which has been operating at Birralee since March 1998 in a number of ways. Caseload midwifery has been researched extensively on a large scale, but very few studies have examined the midwives experiences of this type of care in more depth. Midwives who are not directly involved in providing caseload care may still be affected by the caseload model in some way. You are therefore invited to participate in this study to help us gain a better understanding of how this model of care works for the midwives.

If you choose to be part of this study, you will be required to complete the attached questionnaire and mail it to me in the stamped, addressed envelope provided. You will also be required to fill in the enclosed consent form and include it with the questionnaire.

All the information obtained will be treated as strictly confidential, and anonymity assured. Only my supervisor and myself will have access to the information. The results of the study may appear in publications, however nothing written or published will identify anyone who takes part. The questionnaire you complete will be identified by an allocated number; your name will not appear. All information will be stored in a locked file, in a locked room. The computer files will be password protected.

This research is being undertaken as part of a Master of Midwifery program which I am currently enrolled at RMIT, in the Department of Nursing and Health. Associate Professor Diane Cutts is the supervisor of the program. Your participation in this study is entirely voluntary, and you can withdraw

at any time if you wish to do so. You could do that by contacting myself or my supervisor.

If you have any questions or concerns regarding the study, please feel free to contact myself or Diane Cutts at any time on the numbers below.

Thank you for considering to participate in this study.

Della Forster
Midwife
Ph 9480 3797

Assoc Professor Diane Cutts
Midwife
Ph 9925 7448

Any queries or complaints about your participation in this project may be directed to the Secretary, RMIT Human Research Ethics Committee, RMIT, GPO Box 2476V, Melbourne, 3001. The telephone number is (03) 9925 1745.

Appendix VII

Demographic questionnaire and interview schedule for the women in sub-unit one

Research Number:

Date:

Background Questionnaire

**Caseload Midwifery:
a case study examining the effect of implementing
this model of care in a metropolitan maternity
facility**

[Please answer the following questions by either placing a tick in the box next to the answer which best applies, or filling in the answer]

1 What is your date of birth?

--	--

day

--	--

month

--	--

year

2 Are you..

- ☐ 1 Married
- ☐ 2 Living with your partner
- ☐ 3 Not living with your partner
- ☐ 4 Divorced or separated
- ☐ 5 Widowed
- ☐ 6 Single

3 In which country were you born?

.....

4.1 Is English your first language?

- ☐ 1 Yes (go to question 5)
- ☐ 2 No

4.2 If NO, how well can you speak English?

- ☐ 1 Very well
- ☐ 2 Fairly well
- ☐ 3 Not very well
- ☐ 4 Do not speak English

5. When did you leave school?

- ☐ 1 Completed secondary school to Year 12
- ☐ 2 Attended secondary school but did not complete final year
- ☐ 3 Attended primary school only
- ☐ 4 Did not attend school

6. Have you completed further study since leaving school?

- ☐ 1 Finished a degree
- ☐ 2 Currently completing a degree
- ☐ 3 Completed a diploma
- ☐ 4 Currently completing a diploma
- ☐ 5 Completed an apprenticeship or traineeship
- ☐ 6 Currently completing an apprenticeship or traineeship
- ☐ 7 None of these

7. Are you covered by private health insurance?

- ☐ 1 No, public patient covered by Medicare only
- ☐ 2 Yes, covered by private health insurance

8. Before becoming pregnant, approximately how many cigarettes did you smoke a day?

- ☐ 1 None
- ☐ 2 1 - 9
- ☐ 3 10 - 19
- ☐ 4 20 - 29
- ☐ 5 30 - 39
- ☐ 6 More than 40

9.1. Is this your first baby?

(Please do not include previous terminations or miscarriages before 20 weeks of pregnancy)

- ☐ 1 Yes, first baby (go to question 10)
☐ 2 No

9.2 If NO, how many babies have you had before?

.....baby/babies

9.3 For your previous baby (babies), what type of care did you have?

(You may tick more than one)

- ☐ 1 Caseload midwifery care
☐ 2 Midwife clinic at a public hospital
☐ 3 Doctors clinic at a public hospital
☐ 4 GP shared care
☐ 5 Private obstetric care
☐ 6 Other (please specify).....

10 Do you plan to breast feed or bottle feed this baby?

- ☐ 1 Breast feed for less than three months
☐ 2 Breast feed for 3-5 months
☐ 3 Breast feed for 6 months or longer
☐ 4 Plan to breast feed, but no plans as to how long
☐ 5 Bottle feed
☐ 6 Not sure

Thank you for completing this background questionnaire.

Research Number:

Date:

Location of interview

Interview Length (mins):

Explanation

Thank you again for consenting to take part in this study. With your permission I will tape the interview. I'll be asking you to tell me about your experiences, thoughts and feelings leading up to and during the birth of your baby, and how you have been and felt since then.

There are no right or wrong answers to the questions I'll be asking. It is **your** views I am interested in. You can certainly choose not to answer any questions, just tell me. Also, tell me anytime you would like to stop during the interview, or if you would like to ask any questions.

Interview Schedule

Caseload midwifery

Why did you choose caseload midwifery for your care this pregnancy?

The pregnancy

What would you describe as the most important aspects of your care during your pregnancy? For example, what was most important to you?

What (if any) were the positive aspects of caseload midwifery care during pregnancy?

What (if any) were the negative aspects of caseload midwifery care during pregnancy?

Generally, how would you describe your care during pregnancy?

Did this differ from what you expected?

Do you feel that caseload midwifery care met your needs during the pregnancy?

If so, in what ways?

If not, why was this so?

How would you describe the information you received during the pregnancy?

Was there areas in which you felt either well informed or inadequately informed?

Do you feel that there were any aspects of care missing during your pregnancy, and if so, what were they?

Do you have any other comments on either your care during pregnancy or your personal experience of being pregnant?

Labour and birth

What would you describe as the most important aspects of your care during the labour and birth? What was most important to you?

What (if any) were the positive aspects of caseload midwifery care during labour and birth?

What (if any) were the negative aspects of caseload midwifery care during labour and birth?

Generally, how would you describe your care during labour and birth?

Did this differ from your expectations?

Do you feel that caseload midwifery care met your needs during this period?

Do you have any other comments about your care, or your experiences of the labour and birth?

The postnatal period

What would you describe as the most important aspects of your care while you were in hospital after the baby was born? What was most important to you?

What (if any) were the positive aspects of being part of caseload care during the postnatal period in hospital?

What (if any) were the negative aspects of caseload care during the postnatal period in hospital?

Do you feel that caseload midwifery care met your needs during your postnatal stay?

How long did you stay in hospital after the baby was born?

Would you say this was the right amount of time for you?

Do you have any other comments about your care, or your experience during the first few days after the baby was born?

Since you've been home

How many visits and or phone calls have you had from the midwives since you have been home?

How would you describe the care you received from the midwives while at home?

Did you know the midwives who visited you?

What (if any) were the positive aspects of being part of caseload care since you have been home?

What (if any) were the negative aspects of being part of caseload care since you have been home?

How did you feel about the number of home visits you received?

Do you have any other comments on your care since being home?

Breastfeeding

Do you feel that being part of caseload care had any effect on how you fed your baby?

(If breastfeeding) What aspects of your care would you describe as helpful in regard to breastfeeding?

What aspects of your care would you describe as unhelpful in regard to breastfeeding?

Do you think caseload care had any effects on breastfeeding?

Baby care/ confidence with mothering

Did you feel adequately prepared for caring for your baby?

Where did you receive information/ education on baby care/ parenting?

What (if any) were the positive aspects of being part of caseload care in regard to preparation for being a mother?

What (if any) were the negative aspects of being part of caseload care in regard to preparation for being a mother?

Do you have any other comments on the care you received regard to looking after your baby.

Other comments

Do you have any other comments on any aspect of your pregnancy, birth or the postnatal period?

Thank you for being part of this study.

Appendix VIII

**Demographic questionnaire and interview schedule
for the midwives in sub-unit two**

Research Number:

Date:

Background Questionnaire

**Caseload Midwifery:
a case study examining the effect of implementing
this model of care in a metropolitan maternity
facility**

[Please answer the following questions by either placing a tick in the box next to the answer which best applies, or filling in the answer]

1. What is your date of birth?

--	--

day

--	--

month

--	--

year

2. How long have you been a midwife?

- ☐ 1 Less than one year
- ☐ 2 One to five years
- ☐ 3 Six to ten years
- ☐ 4 Over ten years
- ☐

3. Where did you undertake midwifery education?

- ☐ 1 Hospital
- ☐ 2 College/ university
- ☐ 3 Other (please comment)
- ☐

4. What tertiary qualifications do you hold? (you may tick more than one)

- ☐ 1 Diploma
- ☐ 2 Degree
- ☐ 3 Graduate Diploma
- ☐ 4 Masters Degree
- ☐ 5 PhD
- ☐ 6 Other (please comment)

Interview Schedule: Caseload Midwives

“You as a caseload midwife”

Why did you become involved in caseload midwifery?

Are you taking a ‘full’ caseload, or are you rostered to the department and take on occasional cases?

How long have you been involved in caseload midwifery?

Did you have any concerns/ worries/ fears in the beginning? If so, what?

What would you say were the positive aspects of your role as a caseload midwife?

What would you say were the negative aspects of your role as a caseload midwife?

How are you feeling currently about being a caseload midwife?

What has been the effect on your job satisfaction?

What do you feel you have gained personally from the position?

What do you feel you gained professionally from the position?

Professional Issues

How do you view the contemporary role of the midwife?

Prior to taking on caseload midwifery, to what level did you feel your midwifery skills were being utilised?

Comment on your midwifery skills as a result of your work as a caseload midwife?

Comment on the support received from your interdisciplinary colleagues around you. Has this changed since the caseload model commenced?

How do you feel about the functioning of the caseload model, including rostering, on call work and so on?

How do you think the position you have had will impact on your practice as a midwife in the future?

Outcomes

How do you think caseload care affects women's outcomes and feelings?

Comment on the effect of the caseload midwifery model of care on the client/midwife relationship?

How do you feel about the inclusion of women who are 'high risk' during their pregnancy?

Overall, describe your opinion of this model of care?

Do you wish to continue to work in this model of care? Why?

Do you have any other comments?

Appendix IX

Questionnaire for the midwives in sub-unit three

Caseload midwifery: a case study examining the effect of implementing this model of care in a metropolitan maternity facility

Thank you for participating in this research. Below is a brief explanation of how to fill out to following questionnaire.

HOW TO FILL IN THE QUESTIONNAIRE

Many of the questions can be answered by putting a tick in the box next to the answer that best applies to you, as in the **example** below.

How long have you been a midwife?

- | | |
|-------------|---------------------------------------|
| < 1 year | <input type="checkbox"/> ₁ |
| 1- 5 years | <input type="checkbox"/> ₂ |
| 6- 10 years | <input type="checkbox"/> ₃ |
| > 10 years | <input type="checkbox"/> ₄ |

Other questions can be answered by **circling ONE number** between 1 and 5. In the following question 1 means you “*disagree strongly*”, 2 means you a “*disagree slightly*”, 3 means you “*agree in some ways and disagree in others*”, 4 means you “*agree slightly*” and 5 means you “*agree strongly*”.

The caseload midwifery model is a good option of care for women.

Disagree strongly 1 2 3 4 5 Agree strongly

SECTION ONE: BACKGROUND INFORMATION

1. What is your age?

< 20 years ☐₁

20-30 years ☐₂

31-40 years ☐₃

41-50 years ☐₄

> 50 years ☐₅

2. How long have you been a midwife?

< 1 year ☐₁

1-5 years ☐₂

6-10 years ☐₃

> 10 years ☐₄

3. Do you work..

Full time ☐₁

Part time ☐₂

4. Where did you undertake midwifery education?

In a hospital program ☐₁

In a college/university ☐₂

5. What tertiary qualifications do you hold? (you may tick more than one)

Diploma ☐₁

Degree ☐₂

Graduate Diploma ☐₃

Masters Degree ☐₄

PhD ☐₅

SECTION 2: PROFESSIONAL ISSUES

6. The initial midwifery qualification adequately prepares midwives to be the primary caregiver for women throughout an uncomplicated pregnancy and labour.

Disagree strongly 1 2 3 4 5 Agree strongly

7. Midwives are able to fully utilise their skills.

Disagree strongly 1 2 3 4 5 Agree strongly

8. I feel confident to recognise deviations from normal during pregnancy and refer to the appropriate professional.

Disagree strongly 1 2 3 4 5 Agree strongly

9. I feel confident to recognise deviations from normal during labour and birth and refer appropriately.

Disagree strongly 1 2 3 4 5 Agree strongly

10. I feel valued as a midwife.

Disagree strongly 1 2 3 4 5 Agree strongly

11. I feel that midwives and obstetricians work effectively together.

Disagree strongly 1 2 3 4 5 Agree strongly

12. What professional development activities have you participated in over the last 12 months? (may tick more than one)

- Inservice education ☐ 1
- Internal seminar ☐ 2
- External seminar ☐ 3
- External short course ☐ 4
- University program ☐ 5
- Other (please specify) ☐ 6

SECTION 3: CASELOAD MIDWIFERY

13. I have a good understanding of the concept of caseload midwifery.

Disagree strongly 1 2 3 4 5 Agree strongly

14. The caseload midwifery model is a good option of care for women.

Disagree strongly 1 2 3 4 5 Agree strongly

15. Women choosing caseload midwifery want to have “natural” childbirth.

Disagree strongly 1 2 3 4 5 Agree strongly

16. Caseload midwifery care should be restricted to “low risk” women.

Disagree strongly 1 2 3 4 5 Agree strongly

17. All women should be offered the option of midwifery led care for their pregnancy and birth.

Disagree strongly 1 2 3 4 5 Agree strongly

18. The main idea behind caseload midwifery is to get to know the midwife.

Disagree strongly 1 2 3 4 5 Agree strongly

19. Caseload midwifery is the same as team midwifery.

Disagree strongly 1 2 3 4 5 Agree strongly

20. Studies demonstrate that choice, continuity and control are important aspects of pregnancy care.

Disagree strongly 1 2 3 4 5 Agree strongly

21. Studies have shown that midwifery led models of care have which of the following outcomes: (please tick all that you think are true).

- Less perineal trauma ☐1
 - Lower intervention rates ☐2
 - Increased midwife burnout ☐3
 - More midwife satisfaction ☐4
 - Increased client satisfaction ☐5
 - Lower PPH rates ☐6
 - Safer outcomes for baby ☐7
-

SECTION 4: CASELOAD MIDWIFERY AT BIRRALEE

22. Caseload midwifery is working well at Birralee.

Disagree strongly 1 2 3 4 5 Agree strongly

23. Caseload midwifery should continue as an option of care for women attending Birralee for their pregnancy.

Disagree strongly 1 2 3 4 5 Agree strongly

24. Caseload midwifery is cost effective.

Disagree strongly 1 2 3 4 5 Agree strongly

25. Caseload midwifery improves client satisfaction.

Disagree strongly 1 2 3 4 5 Agree strongly

26. Caseload midwifery is not necessary at Birralee with the new team structure in place.

Disagree strongly 1 2 3 4 5 Agree strongly

27. The positive things about caseload midwifery are:

.....

.....

.....

28. The negative things about caseload midwifery are:

.....

.....

.....

29.1 I would like to participate in providing caseload midwifery care.

- Yes ☐1
- No ☐2
- Not sure (please comment) ☐3

29.2 Please explain your answer to the above question.

.....

.....

.....

30. Do you have any other comments on caseload midwifery care at Birralelee?

.....

.....

.....

Thank you for the time you have taken to fill out this questionnaire.

Appendix X

Summary of data relating to metaphors:

sub-unit one

Table of metaphors and details of data: *sub-unit one* (the women)

Topic area/ question • <i>Metaphor</i>	Themes from data relating to metaphor
<i>Why did you choose caseload midwifery care?</i>	
• <i>Recommended</i>	Recommended by friend Recommended by staff
• <i>Convenient</i>	Less waiting times Appointment times more convenient
• <i>Unhappy with other care</i>	Didn't like doctor
PREGNANCY	
<i>Important aspects of care during pregnancy</i>	
• <i>Continuity</i>	Continuity: having one person Going to same person all the time
• <i>Accessibility</i>	Always have access to caseload midwives Can get advice any time
• <i>Waiting times</i>	No waiting with caseload Much shorter waits than with doctors visits
<i>Was the care like you expected it to be?</i>	
• <i>No expectations</i>	Had no idea or expectations of care
• <i>Better than expected</i>	Quite different/ better than expected: - shorter waiting times - known by the midwife
• <i>As expected</i>	It was how I thought it would be
<i>Did caseload meet your needs during pregnancy?</i>	
• <i>Met needs</i>	Yes Midwives always there for you and they were good
<i>Comment on the information you received during pregnancy</i>	
• <i>Well informed</i>	Always well informed
• <i>Felt free to ask</i>	Always felt I could ask questions Midwife always answered any questions
LABOUR and BIRTH	
<i>Important aspects of care during labour and birth</i>	
• <i>Reassurance</i>	Reassurance that all going well Reassurance baby OK

<ul style="list-style-type: none"> • <i>Having a known midwife</i> 	<p>Having my midwife there Having a midwife I knew made me feel comfortable</p>
<p><i>If your midwife was not there, or if she had not been there, how would you feel?</i></p>	
<ul style="list-style-type: none"> • <i>May not/ did not matter</i> 	<p>Might not have mattered Would be OK Didn't worry me at the time Not there for the birth, but there soon after, so as if she was there</p>
<ul style="list-style-type: none"> • <i>More relaxed and comfortable with her there</i> 	<p>More relaxed with her there Trusted her, so more comfortable with her there Not as comfortable if none of my [known] midwives there</p>
<ul style="list-style-type: none"> • <i>Midwives can't always be there</i> 	<p>Midwives can't be there all the time Women knew their midwife may not be there</p>
<p>POSTNATAL</p>	
<p><i>Important aspects of care during postnatal stay</i></p>	
<ul style="list-style-type: none"> • <i>Help available if/ when needed</i> 	<p>Knowing people there if I needed them Midwives always around for you Help with problems</p>
<p><i>Views about caseload care during postnatal stay?</i></p>	
<ul style="list-style-type: none"> • <i>Good follow up seeing known midwife</i> 	<p>Good to see my midwife as she knew me Felt more free to ask caseload midwife any questions Visits from caseload midwife were enough</p>
<ul style="list-style-type: none"> • <i>Had no effect</i> 	<p>Caseload care had no effect on postnatal stay</p>
<p>DOMICILIARY CARE and BEYOND</p>	
<p><i>Importance of known midwife for home visit?</i></p>	
<ul style="list-style-type: none"> • <i>More comfortable</i> 	<p>Would not feel as comfortable with unknown midwife More comfortable with midwife I knew Would rather midwives I knew</p>
<ul style="list-style-type: none"> • <i>More likely to pick up problems</i> 	<p>More likely to pick up problems Feel free to ask re problems</p>
<p><i>Effect of caseload care on preparedness for motherhood</i></p>	
<ul style="list-style-type: none"> • <i>Caseload care did not cover parenting issues</i> 	<p>There was no discussion of this area Not the role of the caseload midwife- should be taught in antenatal classes Is part of their role, but did not do it- antenatal classes good Did not cover this, but it was 2nd time for me so did not need</p>

Appendix XI

Summary of data relating to metaphors:

sub-unit two

Table of metaphors and details of data: *sub-unit two* (caseload midwives)

Topic area/ question • <i>Metaphor</i>	Themes from data relating to metaphor
<i>Contemporary role of midwife</i>	
• <i>Care throughout pregnancy and birth</i>	Involved in all aspects of childbirth Provide care right through Caseload type role
• <i>There for the woman</i>	To support the woman and her family Advocate for women Listen to women Tell women their rights
• <i>Professional communication and interaction</i>	Communication with other professionals Work independently alongside doctors
• <i>Safe care</i>	Ensure safety of mother and baby
<i>Overall opinion of caseload model</i>	
• <i>Good for women</i>	Suits any woman having a baby Women think it's wonderful Women get a lot of benefit Fantastic for women Unfortunate more can't do it
• <i>Good for midwives</i>	More fulfilling for midwives Glad to be working in caseload
• <i>Effective management necessary</i>	Needs to be well managed
<i>Current feelings about being a caseload midwife?</i>	
• <i>Positive</i>	Really like it Very rewarding Positive
• <i>Worried about sustainability</i>	Some worry about burnout Some worry about where caseload is heading
<i>Concerns, worries or fears when you started caseload?</i>	
• <i>Range of skills required</i>	Skills in antenatal and domiciliary
• <i>On call</i>	On call aspects of position
<i>Positive aspects of role as a caseload midwife</i>	
• <i>Continuity of care</i>	Continuity throughout pregnancy Ongoing feedback and contact Working in all areas See full spectrum of midwifery
• <i>Knowing the woman</i>	Knowing the woman and her family Relationship with the women
• <i>Woman-centred care</i>	Giving woman centred care Women feel good, have their needs met

Negative aspects of role as a caseload midwife	
• <i>Lack of support</i>	Institution not supportive Lack of management support
• <i>On call</i>	On call issues Phone calls in the middle of the night Restricts leisure time Burnout sometimes
• <i>Attitudes of others</i>	Attitudes of other doctors and midwives Women talked out of caseload No understanding of the model Other peoples perceptions and expectations
Effect of being a caseload midwife on job satisfaction?	
• <i>Increased job satisfaction</i>	Good, though not a big change Big impact-role a lot more rewarding More satisfied as have increased autonomy and independence Much more satisfying Know what to expect at work, know women
Personal gains?	
• <i>Increased skills</i>	Opportunity to work in all areas Domiciliary skills Antenatal skills Increased skills all areas
• <i>Increased job satisfaction</i>	Increased job satisfaction
• <i>Education opportunity</i>	Helps educate others Up to date knowledge
• <i>Understand power of the women</i>	Increased understanding and knowledge of women's power
Personal costs?	
• <i>Feeling 'labelled'</i>	You are 'labelled' Other peoples attitudes a problem
• <i>Negative impact on social life</i>	Curtails social life An adjustment for partners/ family
• <i>Affects health negatively</i>	Increased tiredness, decreased energy Health has suffered
• <i>Inadequate reimbursement</i>	Lack of remuneration
Level of utilisation of skills before caseload	
• <i>All skills used but to different levels</i>	All skills being used, less so interpersonal ones Used most skills, but no antenatal or domiciliary Not to full extent- some areas more than others Involved in all areas but on rotational basis More segmented, task orientated

<i>Level of utilisation of skills since caseload</i>	
<ul style="list-style-type: none"> <i>Broader use of skills</i> 	Had to develop skills in all areas More continuity Skills have broadened Grown in confidence Increased skills with special needs women
<i>Support received from colleagues</i>	
<ul style="list-style-type: none"> <i>Depends on individual</i> 	Most midwives supportive Varies depending on the person Some very supportive
<ul style="list-style-type: none"> <i>Not enough support</i> 	Lots of midwives fairly supportive but quite a few are not Lot of negativity from some doctors Some very closed minds Model not valued Administration not supportive at all
<ul style="list-style-type: none"> <i>Increased recognition</i> 	People know who I am Increased recognition, especially from doctors
<ul style="list-style-type: none"> <i>Need a supportive home life</i> 	Those at home need to understand and be supportive Friends and family understanding and supportive
<i>Perceived effects of model for women</i>	
<ul style="list-style-type: none"> <i>Supported</i> 	Women feel supported Midwives are advocates
<ul style="list-style-type: none"> <i>Happy</i> 	Women feel special and happy with care Satisfied with care Happy with model Women come back a second time Positive outcomes and feelings
<ul style="list-style-type: none"> <i>Empowered</i> 	More informed choices Increased responsibility for own health Women more pro-active Women more likely to look for help if they need it
<ul style="list-style-type: none"> <i>Unsure of effect on obstetric outcomes</i> 	Don't know outcomes Not sure
<i>Should caseload include women at 'high risk' of complications?</i>	
<ul style="list-style-type: none"> <i>More demanding for midwife</i> 	Enormous goals to be achieved More taxing for midwife
<ul style="list-style-type: none"> <i>Midwife care should be a choice</i> 	Midwife care important: OK if obstetricians supportive Women have a right to midwife care
<ul style="list-style-type: none"> <i>May have more need for midwife care</i> 	Often need it more than others Should not be excluded

<i>Current functioning of model</i>	
<ul style="list-style-type: none"> <i>Works quite well</i> 	Working pretty well On call OK to an extent No problem with roster Rostering is least of problems
<ul style="list-style-type: none"> <i>System evolving to suit midwives' needs</i> 	New system of one month off call in four will help New system will be wonderful New plan an improvement
<ul style="list-style-type: none"> <i>Teamwork important</i> 	Good working as a team Depends on flexibility of team
<i>Impact of being a caseload midwife on future career</i>	
<ul style="list-style-type: none"> <i>Hard to go back</i> 	Hard to go back to normal roster Couldn't go back
<ul style="list-style-type: none"> <i>Help future practice</i> 	In good stead Very broad- could go in any direction Has set me up

Appendix XII

**Total responses to each point on
Likert- type scale questions**

Question	1 No. (%)	2 No. (%)	3 No. (%)	4 No. (%)	5 No. (%)
	Disagree Strongly		Agree Strongly		
The initial midwifery qualification adequately prepares midwives to be the primary caregiver for women throughout an uncomplicated pregnancy and labour (n=37)	1 (2.7)	7 (18.9)	7 (18.9)	14 (37.8)	8 (21.6)
Midwives are able to fully utilise their skills (n=37)	0	3 (8.1)	9 (24.3)	14 (37.8)	11 (29.7)
I feel confident to recognise deviations from normal during <i>pregnancy</i> and refer to the appropriate professional (n=37)	0			9 (24.3)	28 (75.7)
I feel confident to recognise deviations from normal during <i>labour and birth</i> and refer appropriately. (n=37)	0	1 (2.7)	0	3 (8.1)	33 (89.2)
I feel valued as a midwife (n=37)	0	1 (2.7)	7 (18.9)	20 (54.0)	9 (24.3)
I feel that midwives and obstetricians work effectively together (n=36)	0	3 (8.3)	14 (38.9)	15 (41.7)	4 (11.1)

Question	1 No. (%)	2 No. (%)	3 No. (%)	4 No. (%)	5 No. (%)
	Disagree Strongly		Agree Strongly		
I have a good understanding of the concept of caseload midwifery (n=37)	0	1 (2.7)	2 (5.4)	14 (37.8)	20 (54.1)
The caseload midwifery model is a good option of care for women (n=36)	0	1 (2.8)	6 (16.7)	10 (27.8)	19 (52.8)
Women choosing caseload midwifery want to have " <i>natural</i> " childbirth (n=37)	1 (2.7)	1 (2.7)	14 (37.8)	13 (35.1)	8 (21.6)
Caseload midwifery care should be restricted to " <i>low risk</i> " women (n=37)	1 (2.7)	9 (24.3)	10 (27.0)	10 (27.0)	7 (18.9)
All women should be offered the option of <i>midwifery led</i> care for their pregnancy and birth (n=37)	1 (2.7)	1 (2.7)	4 (10.8)	11 (29.7)	20 (54.1)
The main idea behind caseload midwifery is to get to know the midwife (n=37)	1 (2.7)	5 (13.5)	9 (24.3)	11 (29.7)	11 (29.7)
Caseload midwifery is the same as team midwifery (n=36)	14 (38.9)	14 (38.9)	4 (11.1)	2 (5.6)	2 (5.6)
Studies demonstrate that choice, continuity and control are important aspects of pregnancy care (n=36)	0	0	4 (11.1)	9 (25.0)	23 (63.9)

<i>Question</i>	1 No. (%)	2 No. (%)	3 No. (%)	4 No. (%)	5 No. (%)
	Disagree Strongly			Agree Strongly	
Caseload midwifery is working well at Birralee (n=37)	1 (2.7)	2 (5.4)	15 (40.5)	17 (45.9)	2 (5.4)
Caseload midwifery should continue as an option of care for women attending Birralee for their pregnancy (n=37)	1 (2.7)	2 (5.4)	7 (18.9)	11 (29.7)	16 (43.2)
Caseload midwifery is cost effective (n=34)	7 (20.6)	9 (26.5)	11 (32.4)	5 (14.7)	2 (5.8)
Caseload midwifery improves client satisfaction (n=37)	0	2 (5.4)	4 (10.8)	15 (40.5)	16 (43.2)
Caseload midwifery is not necessary at Birralee with the new <i>team</i> structure in place (n=37)	14 (37.8)	10 (27.0)	5 (13.5)	3 (8.1)	5 (13.5)

RMIT LIBRARIES



3 1259 00602 4702